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Sir J. F. W. Herschel Bartth

From the Royal Astronomical Society

ASTRONOMICAL OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, EDINBURGH.

BY

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INTRODUCTION.

THE Royal Observatory at Edinburgh is situate on the Calton Hill, in the north-eastern quarter of the city, in Latitude $55^{\circ} 57' 23''.2$ North, and Longitude $0^h 12^m 43^s.0$ of time, or $3^{\circ} 10' 45''$ of space, West of the meridian of Greenwich. The upper surface of the square plinth of the base of the central column, bearing the Equatorial Telescope, is 349.16 feet above the mean level of the sea in the Frith of Forth at Leith.

The Observatory, and the principal instruments, viz. the Transit Instrument, Mural Circle, Equatorial Telescope, and Clock, are particularly described in the preceding Volumes.

The objects chiefly observed with the meridian Instruments during the year 1839 were the Sun, Moon, and Planets, the principal Stars for ascertaining the error and rate of the Clock and the position of the Instruments, Moon-Culminating Stars, Stars contained in the Catalogue of the Royal Astronomical Society, situate to the north of the parallel of 20° South Declination, and Stars of the sixth and greater magnitudes contained in GROOMBRIDGE'S Catalogue, and situate within 5° of the North Pole.

Observations made with the Transit Instrument.

Nearly the whole of these observations have been made by the Assistant-Astronomer, ALEXANDER WALLACE, M. A. Those to which the mark † is annexed in the last column of the observations were made by myself.

For the determination of the personal equation subsisting between our different modes of observing, transits of Stars near the Equator were observed on several days during this year at Wires I and V by one of us, and at Wires II, III, and IV by the other. The observations are inserted among those made with the Transit Instrument; and it was found that in every instance his times of estimating transits were later than mine, the differences being as follows:—

March	18.....20 Virginis..... ^{s.} 0.28	July	8.....A. S. C. 1956..... ^{s.} 0.50
	21.....93 Leonis.....0.18		
	23.....33 Sextantis.....0.32	September	21.....69 Aquilæ.....0.62
	25.....ζ Hydræ.....0.28		70 Aquilæ.....0.57
	29.....55 Leonis.....0.25		1 Aquarii .....0.52
	30.....23 Sextantis.....0.20		3 Aquarii .....0.65
April	8.....10 Sextantis .....0.20	October	5.....A. S. C. 2602.....0.65
	10.....A. S. C. 1195.....0.42		A. S. C. 2607.....0.62
May	6.....79 Leonis.....0.63		19.....10 Ceti.....0.35
	7.....79 Leonis.....0.45		12 Ceti.....0.25
	9.....A. S. C. 1367.....0.20	December	24.....A. S. C. 315.....0.35
	10.....A. S. C. 1393.....0.50		λ Ceti.....0.48
	11.....A. S. C. 1432.....0.48		
	16.....A. S. C. 1614.....0.67		Mean of 25 observations, 0.42

Hence, to reduce the times of transit observed by him to those which would have been observed by me, 0.42 is to be subtracted from the former; and the same quantity is to be added algebraically to the correction of the Clock obtained from his observations, to give the correction which would have been obtained from mine. This personal equation has not been applied in any instance, as care has always been taken not to mix the observations of one observer with those of the other, in determining the rate of the Clock, or the Right Ascension of an unknown object by comparison with the Right Ascensions of known Stars, except in the case of α and δ *Ursæ Minoris*, where the errors of observation are greater than the equation. Following this rule, the corrections of the Clock deduced from my observations are distinguished by the mark † annexed to them in the Table, pp. 76–79.

The Transit Instrument was occasionally reversed, as mentioned in the observations, and, between two consecutive reversings, the instrument was used in one position of the axis, which is indicated with respect to its illuminated end being east or west, in the Table of the Error of Collimation given below.

The intervals of the Wires reduced to the Equator were determined from 71 observations of transits of α *Ursæ Minoris*, over all the Wires, made in the course of the year; and the distances of the Wires from their mean or middle point were found to be,

Wire I.....	+ 26.560	} Sidereal time;
II.....	+ 13.283	
III.....	+ 0.009	
IV.....	– 13.291	
V.....	– 26.559	

the Wires being numbered for observations above the Pole in that position of the instrument when the illuminated end of the axis is West. These numbers have been used in reducing the imperfect transits of this year.

In computing the reductions to the mean of the Wires of observations of Stars within 5° of the Pole, the rigorous formula,

$$\sin \text{reduction} = \sin \text{equatorial interval} \times \sec \text{Declination},$$

was employed. For other objects, the formula,

$$\text{reduction} = \text{equatorial interval} \times \sec \text{Declination}.$$

For the Sun and Planets, the motion in Right Ascension has been allowed for: in the case of the Moon, BESSEL's method in the *Tabulæ Regiomontane* has been adopted.

In the original manuscript observations, the minutes of the transits over all the Wires observed for Stars near the Pole, and over the last Wire observed for other bodies, and the hours of the column of Reduction to Mean of Wires, are entered, but they have been omitted in printing, to save space.

The column Correction of Instrument, contains the corrections of the observed transits, arising from the deviation of the instrument from the meridian. The column Correction of Clock observed, contains the corrections of the clock obtained from the observations of the standard Stars; and that entitled Correction of Clock interpolated, contains the corrections of the Clock interpolated from the mean corrections deduced from observations. The computation of these three columns will be explained presently. The sign +, prefixed to the correction of the Clock, denotes that the Clock is slow; the sign —, that it is fast.

The sum of the numbers in the columns, Reduction to Mean of Wires, Correction of Instrument, Correction of Clock interpolated, is the Apparent Right Ascension observed, given in the last column bearing that title.

The formula for correcting the observed transits for the deviation of the instrument from the meridian is

$$\text{Correction} = (a \sin \text{Zenith distance} + b \cos \text{Zenith distance} + c \pm 0^{\text{s}}.028 \cos \text{Zenith distance}) \sec \text{Declination} \quad (1)$$

a denoting the eastern distance of the plane perpendicular to the axis of rotation from the meridian at the south horizon, or the azimuth of the instrument, b , the eastern distance of the same plane from the meridian at the zenith, or the inclination of the axis of rotation, positive when the west end is high, and c , the error of collimation of the mean of the Wires *minus* $0^{\text{s}}.012$ for the diurnal aberration, positive when the line of collimation is east of the line perpendicular to the axis of rotation. a , b , and c are expressed in time, and the Zenith distance is positive when the object is south of the Zenith. The quantity $\pm 0^{\text{s}}.028$ is a correction applied to the error of collimation, and was deduced from the observations of the meridian marks, as explained in the Introduction to the preceding Volume,

pp. xxii–xxv, the upper sign being used in the western position of the illuminated end of the axis, and the lower sign in the eastern.

In practice, the following transformation of the preceding formula has been employed :

$$\text{Correction} = m + n \tan \text{Declination} + c \sec \text{Declination} \quad . \quad . \quad . \quad . \quad . \quad (2)$$

m and n being related to the quantities a and b by these expressions

$$m = a \sin \text{Latitude} + (b \pm 0^s.028) \cos \text{Latitude} \quad . \quad . \quad . \quad . \quad . \quad (3)$$

$$n = -a \cos \text{Latitude} + (b \pm 0^s.028) \sin \text{Latitude} \quad . \quad . \quad . \quad . \quad . \quad (4)$$

The error of collimation of Wire III has been determined from the observations of the meridian marks in the reversed positions of the axis, in the manner explained in the Introduction to the preceding Volume, pp. ix–x. For the reversings of the instrument the error of collimation of Wire III was thus found to be

1839,	s.	1839,	s.
Jan. 7.....	–0.099	Oct. 14.....	–0.112
Feb. 9.....	–0.099	Nov. 11.....	–0.095
May 21.....	–0.132	Dec. 11.....	–0.097
June 24.....	–0.151		
July 29.....	–0.132	1840.	
Sept. 17.....	–0.122	Jan. 18.....	–0.094

the sign here given being that which belongs to the western position of the illuminated end of the axis.

The quantities adopted are

Jan. 1—March 15	– 0.101	Mean of 3 determinations of 1838, and those of January 7 and February 9.
March 15—April 16	– 0.116	Mean of preceding value, and that of May 21.
April 16—May 21	– 0.132	Value of May 21.
May 21—June 24	– 0.142	} Mean of values at beginning and end of each period.
June 24—July 29	– 0.142	
July 29—Sept. 17	– 0.127	
Sept. 17—Oct. 14	– 0.117	
Oct. 14—Nov. 11	– 0.104	
Nov. 11—Dec. 11	– 0.096	
Dec. 11—Dec. 31	– 0.094	

To these quantities increased by 0.009 for the distance of Wire III from the mean of the Wires (the sign of the sum being changed in the eastern position of the illuminated end of the axis), there is applied –0.012 for the diurnal aberration, and there are obtained the following values of the error of collimation of the mean of the Wires to be employed in formula (2) :

	Period.		c	Illuminated end of Axis.
Jan.	1—Jan.	7	+ 0.10.....	East
...	7—Feb.	9	— 0.12.....	West
Feb.	9—March	15	+ 0.10.....	East
March	15—April	16	— 0.14.....	West
April	16—May	21	+ 0.13.....	East
May	21—June	24	— 0.16.....	West
June	24—July	29	+ 0.14.....	East
July	29—Sept.	17	— 0.15.....	West
Sept.	17—Oct.	14	+ 0.11.....	East
Oct.	14—Nov.	11	— 0.12.....	West
Nov.	11—Dec.	11	+ 0.09.....	East
Dec.	11— ...	31	— 0.12.....	West

The values of n have been determined by comparing the observed transits of α and δ Ursæ Minoris at their culminations on different sides of the Pole, and, when these were not obtained, by comparing their observed transits and those of the principal Stars distant from the Pole. Let A and A' denote the Right Ascensions of two Stars, the first being near the Pole, D and D' , their Declinations (for the transits *sub polo*, $A + 12^h$ and $180^\circ - D$ being used), and T , T' , the observed times of transit over the mean of the Wires, then (c denoting the error of collimation employed in the reductions taken from the preceding Table),

$$n = \frac{(A - A') - (T - T')}{\tan D - \tan D'} - c \frac{\sin \frac{1}{2}(D + D')}{\cos \frac{1}{2}(D - D')} \quad . \quad . \quad . \quad . \quad . \quad . \quad (5)$$

$T - T'$ being corrected for the rate of the Clock.

On those days, on which the Polar Stars were not observed, the values of n have been determined, by formula (4), from the observations of one or both of the meridian marks, if they were then observed. The azimuth of the Instrument a , which is required for the formula, is obtained from either of the following expressions (Introduction to Volume IV. p. ix.):

$$a = S + s - c = -0^s.77 + s - c \quad . \quad . \quad . \quad . \quad . \quad . \quad (6)$$

when the South mark has been observed;

$$a = -N - n + c = -0^s.57 - n + c \quad . \quad . \quad . \quad . \quad . \quad . \quad (7)$$

when the North mark has been observed;

$$a = \frac{1}{2}(S - N + s - n) = -0^s.67 + \frac{1}{2}(s - n) \quad . \quad . \quad . \quad . \quad . \quad . \quad (8)$$

when both marks have been observed; S denoting the eastern azimuth of the South mark $= -0^s.77$, N , the eastern azimuth of the North mark $= +0^s.57$, s , the observed eastern distance of Wire III from the South mark, n (in the above ex-

pressions), the observed eastern distance of the same Wire from the North mark (s and n being taken from the Table, pp. 68–69), and c , the adopted error of Collimation of Wire III before given. The values of b , also required for formula (2), are interpolated from the Table, p. 69.

The values of n so obtained are given in the Table, pp. 70–74.

The values of m have been determined from one of the following expressions :

$$m = n \cotan \text{Latitude} + a \operatorname{cosec} \text{Latitude} \quad (9)$$

$$m = - n \tan \text{Latitude} + b \sec \text{Latitude} \quad (10)$$

The former was employed on those days when the deviation from the Pole n , and azimuth a , were ascertained, being given in the Table, pp. 70–74, and obtained from the observations of the meridian marks, pp. 68–69 ; and the latter, on those days when n was ascertained, but not a , b being interpolated from the Table, p. 69. In the first case, m is stated in the Table, pp. 74–76, to have been determined from a ; in the second, from b . Sometimes m has been determined from both expressions, and a mean of the results taken, in which case m is stated in the same Table to have been determined from a and b . On those days on which the meridian marks have been observed, but the value of n has not been ascertained from observations of the Polar Stars, m has been determined from the formula (3), and is stated in the Table to have been determined from a and b .

The values of m , n , and c employed in computing the correction of the Instrument according to the formula (2), are contained in the Table, pp. 74–76, the times of the beginning and ending of each set of values being indicated by horizontal lines in the column Correction of Instrument. The asterisks sometimes annexed to the dates in the Table of the values of m , n , and c , denote that on those days, there being no determinations of the values of n or a , means of the preceding and subsequent values of m and n have been taken and inserted in the Table.

The correction of the Instrument for the Moon has been ascertained by increasing the correction for a Star, having the same Declination as the apparent Declination of the Moon, in the proportion of the interval between the Star's transit over two Wires to the observed interval between the Moon's transit over the same Wires.

The value of b is found immediately from the Spirit-level. In the Introduction to the preceding Volume, pp. xi–xii, it has been shewn that the inclination of the axis changes gradually with the temperature of the season, and that it appears to be connected with the changes in the height of a Thermometer, which shews the temperature of the surface of the rock on which the Observatory is built. By the method which is there explained, and from the corresponding observations of the inclination of the axis b , and the temperature of the rock t there given, and the following continuation of them, viz. :

1841,	t	b
March 2	37.4	+0.130
24	47.0	+0.029
April 26	45.2	-0.001
May 26	50.7	-0.067
June 17	53.0	-0.047
Aug. 2	53.5	-0.072
27	58.0	-0.049
Sept. 20	56.8	-0.049

x has been found = 0.0111 from all the observations, and $\tau=49^{\circ}.09$ from the observations of 1839. Consequently the values of b have been computed from the formula,

$$b = 0.0111 \times (49^{\circ}.09 - t)$$

for those days on which the Thermometer was observed but the Level not applied. The values of b are given in the Table Inclination of Axis, p. 69, under the title West end high; and in the last column it is indicated whether they have been determined by the Level or the Thermometer. For times between the dates there mentioned, the values of b are assumed to have varied as the time.

For computing the corrections of the Clock, and the values of n , the following Table of the Mean Right Ascensions of the principal Stars for January 1, 1839, was employed, derived from the observations at Greenwich, Cambridge, and Edinburgh in 1838.

STAR.	Mean Right Ascension, 1839.0.	Difference from Nautical Almanac.	Difference from Berlin Ephemeris.
α Andromedæ.....	$\begin{smallmatrix} h. & m. & s. \\ 0 & 0 & 4.67 \end{smallmatrix}$	$\begin{smallmatrix} s. \\ +0.02 \end{smallmatrix}$	$\begin{smallmatrix} s. \\ +0.04 \end{smallmatrix}$
γ Pegasi.....	$\begin{smallmatrix} 0 & 4 & 57.11 \end{smallmatrix}$	$\begin{smallmatrix} -0.12 \end{smallmatrix}$	$\begin{smallmatrix} -0.07 \end{smallmatrix}$
β Ceti.....	$\begin{smallmatrix} 0 & 35 & 30.27 \end{smallmatrix}$	$\begin{smallmatrix} -0.07 \end{smallmatrix}$	$\begin{smallmatrix} \dots \end{smallmatrix}$
δ^1 Ceti.....	$\begin{smallmatrix} 1 & 15 & 58.61 \end{smallmatrix}$	$\begin{smallmatrix} -0.20 \end{smallmatrix}$	$\begin{smallmatrix} \dots \end{smallmatrix}$
α Arietis.....	$\begin{smallmatrix} 1 & 58 & 6.66 \end{smallmatrix}$	$\begin{smallmatrix} +0.06 \end{smallmatrix}$	$\begin{smallmatrix} +0.02 \end{smallmatrix}$
γ Ceti.....	$\begin{smallmatrix} 2 & 34 & 57.82 \end{smallmatrix}$	$\begin{smallmatrix} -0.26 \end{smallmatrix}$	$\begin{smallmatrix} \dots \end{smallmatrix}$
α Ceti.....	$\begin{smallmatrix} 2 & 53 & 52.16 \end{smallmatrix}$	$\begin{smallmatrix} -0.06 \end{smallmatrix}$	$\begin{smallmatrix} 0.00 \end{smallmatrix}$
η Tauri.....	$\begin{smallmatrix} 3 & 37 & 55.51 \end{smallmatrix}$	$\begin{smallmatrix} +0.01 \end{smallmatrix}$	$\begin{smallmatrix} \dots \end{smallmatrix}$
γ^1 Eridani.....	$\begin{smallmatrix} 3 & 50 & 31.18 \end{smallmatrix}$	$\begin{smallmatrix} -0.04 \end{smallmatrix}$	$\begin{smallmatrix} \dots \end{smallmatrix}$
α Tauri.....	$\begin{smallmatrix} 4 & 26 & 41.32 \end{smallmatrix}$	$\begin{smallmatrix} -0.02 \end{smallmatrix}$	$\begin{smallmatrix} +0.02 \end{smallmatrix}$
α Aurigæ.....	$\begin{smallmatrix} 5 & 4 & 48.36 \end{smallmatrix}$	$\begin{smallmatrix} +0.10 \end{smallmatrix}$	$\begin{smallmatrix} +0.01 \end{smallmatrix}$
β Orionis.....	$\begin{smallmatrix} 5 & 6 & 48.16 \end{smallmatrix}$	$\begin{smallmatrix} -0.05 \end{smallmatrix}$	$\begin{smallmatrix} +0.02 \end{smallmatrix}$
β Tauri.....	$\begin{smallmatrix} 5 & 16 & 7.12 \end{smallmatrix}$	$\begin{smallmatrix} -0.05 \end{smallmatrix}$	$\begin{smallmatrix} -0.03 \end{smallmatrix}$
δ Orionis.....	$\begin{smallmatrix} 5 & 23 & 46.99 \end{smallmatrix}$	$\begin{smallmatrix} -0.12 \end{smallmatrix}$	$\begin{smallmatrix} \dots \end{smallmatrix}$
ϵ Orionis.....	$\begin{smallmatrix} 5 & 28 & 2.75 \end{smallmatrix}$	$\begin{smallmatrix} -0.07 \end{smallmatrix}$	$\begin{smallmatrix} \dots \end{smallmatrix}$
α Orionis.....	$\begin{smallmatrix} 5 & 46 & 27.41 \end{smallmatrix}$	$\begin{smallmatrix} -0.06 \end{smallmatrix}$	$\begin{smallmatrix} 0.00 \end{smallmatrix}$
μ Geminorum.....	$\begin{smallmatrix} 6 & 13 & 13.18 \end{smallmatrix}$	$\begin{smallmatrix} -0.01 \end{smallmatrix}$	$\begin{smallmatrix} \dots \end{smallmatrix}$

STAR.	Mean Right Ascension, 1839.0.	Difference from Nautical Almanac.	Difference from Berlin Ephemeris.
α Canis Majoris	<i>h. m. s.</i> 6 38 3.23	+0.12	+0.16
δ Geminorum	7 10 30.12	-0.11	.....
α Geminorum (mean of the two Stars).....}	7 24 18.82	.....	+0.17
α Canis Minoris	7 30 52.15	-0.23	-0.08
β Geminorum.....	7 35 27.24	-0.15	+0.01
ϵ Hydræ.....	8 38 14.69	-0.25	.....
α Hydræ.....	9 19 40.48	-0.14	+0.06
ϵ Leonis	9 36 41.98	-0.19	.....
α Leonis.....	9 59 47.43	-0.28	+0.01
δ Leonis	11 5 32.21	+0.07	.....
δ Hydræ & Crateris.....	11 11 17.69	-0.13	.....
β Leonis	11 40 50.52	-0.12	+0.01
β Corvi.....	12 25 56.49	-0.08	.....
12 Canum Venaticorum.....	12 48 29.16	-0.31	.....
α Virginis	13 16 43.13	-0.08	-0.05
η Bootis	13 47 1.10	-0.19	.....
α Bootis	14 8 19.18	-0.05	+0.01
ϵ Bootis	14 37 57.30	-0.08	.....
α^2 Libræ.....	14 41 58.96	-0.17	-0.03
β Libræ	15 8 21.03	-0.17	.....
α Coronæ borealis.....	15 27 52.35	+0.01	+0.01
α Serpentis	15 36 20.51	+0.01	-0.04
β^1 Scorpïi.....	15 56 5.06	-0.15	.....
δ Ophiuchi.....	16 5 54.79	-0.10	.....
α Scorpïi.....	16 19 32.81	-0.02	0.00
α Herculis.....	17 7 18.49	-0.07	-0.04
α Ophiuchi	17 27 27.77	-0.02	+0.06
α Lyræ	18 31 29.23	+0.06	-0.03
β Lyræ.....	18 44 8.17	-0.11	.....
ζ Aquilæ.....	18 58 0.58	-0.11	.....
δ Aquilæ	19 17 22.78	+0.09	.....
γ Aquilæ	19 38 36.28	-0.08	-0.07
α Aquilæ	19 42 55.61	-0.08	-0.03
β Aquilæ	19 47 24.23	-0.10	-0.10
α^2 Capricorni	20 9 6.99	-0.02	-0.07
α Cygni.....	20 35 56.64	-0.09	-0.03
ζ Cygni.....	21 6 5.20	-0.08	.....
β Aquarii.....	21 23 4.73	-0.02	.....
ϵ Pegasi.....	21 36 16.67	-0.11	.....
α Aquarii.....	21 57 30.76	-0.08	0.00
ζ Pegasi	22 33 25.96	-0.06	.....
α Pegasi.....	22 56 44.70	-0.07	-0.02
ϵ Piscium.....	23 31 40.31	+0.11	.....
α Ursæ Minoris	1 1 54.40	+0.11	-0.55
δ Ursæ Minoris	18 21 14.86	-0.82	-0.41

The mean difference of the Right Ascensions of the Stars, employed for determining the correction of the Clock, from the Right Ascensions of the Nautical Almanac, is $-0^s.08$; and from those of the Berlin Ephemeris or *Tabulæ Regiomontanæ*, $0^s.00$.

The mean Right Ascensions are converted into apparent by the application of the reductions of mean to apparent places taken from the Nautical Almanac. The Correction of the Clock is determined from the observed transits of the Stars in the foregoing Table (except α and δ *Ursæ Minoris*), the Correction of Instrument being previously applied, compared with their apparent Right Ascensions.

An irregularity appeared to have taken place in the rate of the Clock on March 1; on which account, for determining its correction to be applied to the observations of Mars and the Moon, six Zodiacal Stars were employed, whose mean Right Ascensions for the beginning of the year were, from the previous observations, found to be,

	<i>h.</i>	<i>m.</i>	<i>s.</i>
A. S. C. 1390.....	11	55	31.15
10 Virginis	12	1	26.10
η Virginis.....	12	11	40.25
17 Virginis	12	14	20.70
A. S. C. 1434.....	12	20	5.97
21 Virginis	12	25	28.24

The corrections of the Clock thus determined are contained in the column entitled Correction of Clock observed. When (as is generally the case) several Stars have been observed for the correction of the Clock within the same period of 24 hours, they are comprised in one group, and the mean of the corrections of the Clock, given by the observations, is held to be the correction corresponding to the mean of the times. The beginning and end of each group are indicated by the horizontal lines in the column of Correction of Clock observed. These means, and the corrections obtained from single Stars when only one Star has been observed, with the corresponding times, are contained in the Table, pp. 76–79. For intermediate times, prior to August 31, the corrections are deduced from those immediately preceding and following by simple interpolation, and are entered in the column of the observations bearing the title Correction of Clock interpolated. For the more ready calculation of the interpolated corrections of the Clock, its daily rate, or r , is given in the same Table, and, for the period prior to August 31, it is assumed to be the variation in 24 hours of the Clock's correction during the interval between the date to which it belongs and the one next following. For the period between August 31 and the end of the year there is given in the Table the quantity r' for determining the effect of second differences in computing the interpolated correction of the Clock, which is assumed to be expressed by the formula,

$$\text{Tabular Correction} + t r + t^2 r',$$

t denoting the interval in fraction of a day between the given time and the tabular

time to which the correction and r and r' belong. In computing the correction of the Clock by this formula for any given date, the tabular values of the correction, r and r' , are taken for the date nearest to the one given. The values of r and r' for each tabular date were determined by substituting in the formula the values of the correction of the Clock and t , belonging to the tabular date, and those immediately preceding and following it.

When the correction of the Clock has been obtained from the observation of one Star only, the column of Apparent Right Ascension observed is not filled up for that Star, as it would reproduce the Right Ascension assumed for determining the Clock-correction. For a similar reason, when the elements for the correction of the instrument have been deduced from observations of one of the two Stars, α and δ *Ursæ Minoris*, (the observations above and below the Pole being considered to be of different stars), this column is not filled up for that Star.

The observed apparent Right Ascensions of the Stars, contained in the last column, are reduced to mean Right Ascensions at the commencement of 1839, the values of precession, nutation, aberration, and proper motion being assumed, as in the Nautical Almanac and Astronomical Society's Catalogue. The individual results are contained in the Table, pp. 79–93, and the mean results are given in the Catalogue, pp. 146–157. The Right Ascensions of the Stars employed for determining the correction of the Clock being, on an average, the same as those of the Berlin Ephemeris or *Tabulæ Regiomontanæ*, the zero point of the Catalogue is the position of the Equinox assumed in these Tables.

Observations made with the Mural Circle.

All the observations were made by myself.

There are five vertical Wires in the Telescope, and the equatorial interval between two adjoining vertical wires is 18.1 seconds of sidereal time. The moveable wire is placed at a distance of 7" of space nearly from the fixed horizontal wire, and the object observed bisects the intervening space.

The Telescope remained fixed to the limb of the Circle from the commencement of the observations in 1834 till January 1, 1839, when it was moved about 90°, and being again fixed to the Circle, it remained in this position during the year.

The observations have been read off with the two horizontal Microscopes I and II. A few observations of the Sun have been made by previously setting the Circle approximately to the position of one of the limbs, and reading off the two Microscopes, and afterwards making the line of collimation to coincide with the limb, and reading off Microscope I. In these cases, the previous indications of the

Microscopes are entered in the columns, and the differences between the two readings of Microscope I are subjoined in its column. These differences applied to the mean of the two Microscopes, give the mean Readings of the Circle for those observations.

To the mean of the two Microscopes a correction is applied, given in the column titled Correction, which was taken from the Table in Vol. III. p. xv., constructed from the formula investigated in the Introduction to Vol. I. pp. viii-ix., for reducing angles measured with two Microscopes to the quantities which would have been obtained from six.

In reading off the observations the cross-wires of the Microscopes were made to bisect the sets of divisions immediately preceding the zero point of Microscope I, when this Microscope indicated a quantity less than $2' 30''$ to be added to the degrees and minutes of the preceding division; and the sets immediately following the same point, when the quantity indicated to be added was greater than $2' 30''$: except the observations distinguished by asterisks in the column of Object observed, in which the reverse rule was observed. The mean values of the runs of the Microscopes for the different portions of the year are given in the Table, p. 134, being the means of values found from sets of readings made at the beginning and end of each period.

To correct the mean of the readings of the Microscopes for the difference of the runs from $300''$, let the mean quantity indicated to be added to the degrees and minutes of the preceding divisions be denoted by m , when the divisions bisected preceded the zero point of Microscope I, and by m' when they followed this point, and let r denote the mean value of the runs taken from the Table. Then the correct quantity to be added is

$$\frac{300'' m}{r}, \quad \text{or,} \quad \frac{300'' (m' + r - 300'')}{r}.$$

The mean Reading of the Circle is found by applying the Correction for two Microscopes to the mean of the Microscopes corrected for runs. The degrees and minutes given under mean reading of Circle are those which were under Microscope I.

The observations were made at the transits of the objects over the meridian, or of their centres, in the cases of the Sun, Moon, and Planets, unless otherwise mentioned in the Notes, where the necessary information is given for determining the horary angle, and thence the reduction to the meridian. The times of the observations are given by the Assistant Clock placed beside the Circle, its rate being sufficiently uniform for reducing the observations. The corrections to be applied to this Clock to obtain the true sidereal time are given in the Table, pp. 134-135. Transits of Stars over Wire III were frequently observed, for the purpose of ascertaining its deviation from the meridian; and it appeared that,

during the period from January 1 to March 30, Wire III was west of the meridian by the following quantities :

Declination.	Deviation.	Deviation reduced to great Circle.
° ' "	° ' "	° ' "
- 11 20	5.4 of time.	5.3
+ 23 6	5.9 ~~~~~	5.4
46 50	8.0 ~~~~~	5.5
69 40	15.4 ~~~~~	5.3
86 35	86.0 ~~~~~	5.1
88 27	182.2 ~~~~~	4.9
88 49 S. P.	238.5 ~~~~~	4.9
86 35 S. P.	81.8 ~~~~~	4.9

The transits over Wire III above the Pole being later than the transits over the meridian by the quantities here stated, and under the Pole earlier.

On March 30 the Wire-plate was moved to bring Wire III nearer the meridian, as mentioned in the Notes to that day's observations, and from the transits of Stars observed during the remainder of the year, it appeared that Wire III was west of the meridian by the following quantities :

Declination.	Deviation.	Deviation reduced to great Circle.
° ' "	° ' "	° ' "
- 15 8	0.8 of time.	0.7
+ 19 15	0.9 ~~~~~	0.8
51 27	1.8 ~~~~~	1.1
71 0	2.8 ~~~~~	0.9
86 35	12.2 ~~~~~	0.7
87 16	11.0 ~~~~~	0.5
88 27	27.3 ~~~~~	0.7
88 50	29.6 ~~~~~	0.6
88 27 S. P.	18.4 ~~~~~	0.5
87 16 S. P.	10.0 ~~~~~	0.5

The transits over Wire III above the Pole being later than the transits over the meridian by the quantities here stated, and under the Pole earlier.

The Reduction to the Meridian for Stars is composed of two terms. The first, depending on the deviation of the Star's parallel from a great circle, is computed from the formula,

$$\frac{225''}{4} \sin 1'' \sin 2 D \times t^2$$

D denoting the Declination of the object, and t its horary angle, expressed in seconds of time, and $\sin 2 D$ being negative for objects south of the Equator or below the Pole. The second, depending on a small inclination of the horizontal wire of the Circle is, during the period from January 1 to March 30, computed from the formula,

$$- 0''.0123 \cos D \times t$$

t being positive when the time of observation is after the meridian transit; and, during the remainder of the year, from the formula

$$- 0''.0093' \cos D \times t$$

The coefficients were deduced from a comparison of the observations of α *Ursæ Minoris*, made, during this year, at various distances from Wire III. The Reduction for the Sun, Moon, and Planets, has also a third term, being the change of declination during the interval between the time of observation and the meridian transit, positive when the body is moving to the north, and the time of observation is after the transit, or when the body is moving to the south, and the time of observation is before the transit, and negative in other cases.

The Refractions are computed, by Mr Ivory's Tables in the Philosophical Transactions for 1838, the zenith distance being made equal to the difference between the mean reading of the Circle, and the position of the Equatorial point adopted diminished by the Latitude.

To the mean reading of the Circle, the reduction to the meridian and refraction are applied, according to their signs, and the result is the reduced reading of the Circle, or the reading for the meridian observation, clear of the effect of refraction. The reduced readings are converted into Declinations by the following process.

The mean Declinations of the principal Stars, derived from the observations since 1834, were reduced to the beginning of 1839, by the application of the annual precessions and proper motions. The subjoined Catalogue of mean Declinations for January 1, 1839, was thus formed :

STAR.	Mean Declination, 1839-0.	Difference from Nautical Almanac.	Difference from Berlin Ephemeris.
	° ' "	"	"
λ <i>Ursæ Minoris</i>	+ 88 49 33.0	+ 0.2	.....
α <i>Ursæ Minoris</i>	88 27 3.0	+ 0.4	+ 0.3
δ 1 (Hevelii) <i>Cephei</i>	87 15 47.2	+ 2.7	.....
δ <i>Ursæ Minoris</i>	86 35 27.5	+ 0.8	+ 0.3
ϵ <i>Ursæ Minoris</i>	82 17 27.7	+ 0.4	.....
ζ <i>Ursæ Minoris</i>	78 17 11.6	+ 0.7	.....
γ <i>Cephei</i>	76 44 2.6	+ 0.7	.....
β <i>Ursæ Minoris</i>	74 48 48.0	- 0.9	+ 0.3
β <i>Cephei</i>	69 51 17.4	- 0.1	+ 1.4
α <i>Ursæ Majoris</i>	62 37 6.4	- 1.8	+ 0.3
α <i>Cephei</i>	61 54 18.7	+ 0.8	+ 1.8
η <i>Draconis</i>	61 52 48.6	+ 0.7	.....
ζ <i>Ursæ Majoris</i>	55 46 4.5	.....	.....
α <i>Cassiopeiæ</i>	55 39 12.2	+ 0.1	+ 1.1
γ <i>Ursæ Majoris</i>	54 35 23.8	- 0.9	+ 1.5

STAR.	Mean Declination, 1839-0.	Difference from Nautical Almanac.	Difference from Berlin Ephemeris.
β Draconis	+ 52 25 23.9	+ 0.2	.....
θ Ursæ Majoris	52 24 24.1	+ 0.5	.....
γ Draconis	51 30 37.8	+ 0.1	+ 1.5
η Ursæ Majoris	50 7 8.9	- 0.5	+ 0.6
α Persei	49 16 54.8	- 0.6	+ 0.7
ϵ Ursæ Majoris	48 40 6.2	- 1.7	.....
α Aurigæ	45 49 33.1	- 4.9	0.0
β Aurigæ	44 55 20.4	.....	.....
α Cygni	44 42 29.1	+ 0.3	+ 1.5
12 Canum Venaticorum	39 11 21.3	- 0.5	.....
α Lyrae	38 38 16.1	+ 2.0	+ 1.5
β Lyrae	33 10 48.7	+ 0.2	.....
α Geminorum following	32 14 3.5	- 2.6	0.0
ζ Cygni	29 34 11.1	- 1.9	.....
β Tauri	28 27 51.6	- 2.8	+ 1.6
β Geminorum	28 24 31.7	- 2.0	+ 0.7
α Andromedæ	28 12 5.3	- 1.7	+ 0.4
ϵ Bootis	27 45 23.0	- 1.2	.....
α Coronæ borealis	27 15 38.1	- 2.0	+ 0.3
β Pegasi	27 12 39.8	.....	.....
ϵ Leonis	24 30 44.0	- 0.8	.....
η Tauri	23 36 5.8	- 1.8	.....
α Arietis	22 41 52.0	- 2.4	+ 0.4
μ Geminorum	22 35 22.4	- 1.1	.....
δ Geminorum	22 16 19.9	- 0.9	.....
δ Leonis	21 24 17.4	- 2.4	.....
α Bootis	20 1 25.1	- 1.5	+ 0.5
η Bootis	19 12 28.1	- 3.1	.....
α Tauri	16 10 46.5	- 2.4	+ 0.9
β Leonis	15 28 18.6	- 2.5	+ 0.3
α Herculis	14 34 44.7	- 1.3	+ 1.2
α Pegasi	14 20 25.7	- 1.9	+ 0.5
γ Pegasi	14 17 17.6	- 1.2	+ 0.8
ζ Aquilæ	13 37 46.1	- 2.1	.....
α Leonis	12 45 4.9	- 2.1	+ 0.7
α Ophiuchi	12 40 57.5	- 4.0	+ 0.5
γ Aquilæ	10 13 33.2	- 1.3	+ 1.1
ζ Pegasi	9 59 33.7	- 1.5	.....
ϵ Pegasi	9 8 23.2	- 2.4	.....
α Aquilæ	8 26 53.3	+ 1.8	+ 0.9
α Orionis	7 22 14.3	- 1.6	+ 0.4
ϵ Hydræ	7 0 16.6	- 2.8	.....
α Serpentis	6 56 12.2	- 2.4	+ 0.8
γ Orionis	6 11 51.1	.....	.....
β Aquilæ	6 0 34.5	- 1.4	+ 1.7
α Canis Minoris	5 37 56.0	- 1.6	+ 2.5

STAR.	Mean Declination, 1839.3.	Difference from Nautical Almanac.	Difference from Berlin Ephemeris.
	° ' "	"	"
♌ Piscium.....	+ 4 45 15.4	- 0.2	.....
♎ Ceti.....	3 27 13.9	- 1.6	+ 1.4
♏ Aquilæ.....	2 47 57.7	- 0.7	.....
♐ Orionis.....	- 0 25 26.7	- 0.4	.....
♑ Aquarii.....	1 5 57.0	- 1.7	+ 1.3
♒ Orionis.....	1 18 38.2	- 1.3	.....
♓ Ophiuchi.....	3 16 26.9	- 2.7	.....
♈ Aquarii.....	6 16 31.6	- 0.4	.....
♉ Hydræ.....	7 57 51.3	- 1.8	+ 1.1
♊ Orionis.....	8 23 35.1	- 1.2	+ 1.3
♋ Libræ.....	8 47 1.5	0.0	.....
♌ Ceti.....	9 0 56.6	- 1.7	.....
♍ Virginis.....	10 19 7.1	- 1.7	+ 1.9
♎ Capricorni.....	13 2 18.5	- 2.2	+ 2.7
♏ Hydræ & Crateris.....	13 54 28.6	0.0	.....
♐ Eridani.....	13 58 15.8	- 2.0	.....
♑ Libræ.....	15 22 5.9	- 2.9	+ 0.7
♒ Canis Majoris.....	16 30 2.1	- 1.8	+ 0.9

The apparent declinations of these standard Stars are obtained by applying the corrections of the Nautical Almanac; and being added to the reduced readings, give the positions of the Equatorial point observed, the seconds of which only, for the saving of space, appear in the column bearing that title, the degrees and minutes, $56^{\circ} 0'$, being constant during the year, after the Telescope was moved upon the limb of the Circle on January 1. A mean of the several values obtained during a certain interval, generally 24 hours, during which it is supposed that the position of this point remained without sensible change, is the Equatorial point adopted during the interval. The beginning and end of the intervals are indicated by horizontal lines in the columns of the Equatorial point observed; and the seconds of the Equatorial point adopted are given in the column having that title, at the beginning of each interval, and at the top of each page, the degrees and minutes, $56^{\circ} 0'$, having to be supplied. The adopted position of the Equatorial point on January 1, before the Telescope was moved, $146^{\circ} 5' 51''.6$, was obtained from the observation made on December 31, 1838. The Apparent Declination observed, given in the last column, is the difference between the reduced reading and the position of the Equatorial point adopted. In the case of the Sun, Moon, and Planets, the parallax in declination and semidiameter (when a limb has been observed) have still to be applied, in order to obtain the geocentric Declination of the centre.

The apparent Declinations of the Stars are converted into mean Declinations

for the beginning of 1839, by applying the corrections for precession, nutation, aberration, and proper motion, taken from the elements and subsidiary Tables given in the Nautical Almanac and Astronomical Society's Catalogue. The individual results are given at pp. 136–144; and the mean results are given in the Catalogue, pp. 146–157.

Reduced Observations of the Sun, Moon, and Planets.

The Tables, pp. 160–176, contain comparisons of the Right Ascensions and Declinations of the Sun, Moon, and Planets, and of the Diameters of the Sun, deduced from the observations, with the values computed from the Nautical Almanac.

When both limbs of the Sun or a Planet have been observed with the Transit Instrument, the mean of their Right Ascensions is taken for the Right Ascension of the centre. The observations of the second Limb of Mars, subsequent to March, have been corrected for the defect of illumination, as mentioned in the Note on p. 170.

When only one limb of the Sun or a Planet has been observed, the Right Ascension of the centre has been determined, by applying the semidiameter in Right Ascension taken from the Nautical Almanac.

The observed Right Ascensions of the Sun's and Planets' centres are compared with the values for the transits over the meridian of Edinburgh, computed from the Nautical Almanac.

From the observations of the Moon's diameter, made with the Transit Instrument and Mural Circle, it appears that the computed values given in the Nautical Almanac are too small. In reducing the observations of this year, the tabular semidiameter in Right Ascension has been increased by $\frac{1}{340}$ part, and in Declination by $\frac{1}{340}$ part. In Volume X. of the Memoirs of the Royal Astronomical Society, from a comparison of the Moon's declinations observed at Greenwich, Cambridge, and the Cape of Good Hope, I have found that the Moon's parallaxes in BURCKHARDT'S Tables, which are employed in the Nautical Almanac, should be increased in the proportion of 57' 0".5 to 57' 1".8. These corrections have been applied in comparing the observations of the Moon with the computations of the Almanac.

The observed Right Ascensions of the Moon's limbs (corrected in the observation of March 29 for defect of illuminated disc, as mentioned in the Note), are converted into observed Right Ascensions of the centre for the transit over the meridian by applying the time of the semidiameter passing the meridian, taken from the Nautical Almanac, and increased by $\frac{1}{340}$ part as mentioned above. The observed Right Ascensions of the centre are then compared with the values for the transits over

the meridian of Edinburgh, computed from the list of Moon-culminating Stars in the Nautical Almanac.

The parallaxes in declination of the Sun, Moon, and Planets are computed on the supposition that the ratio of the Earth's axes is = 300 : 299, whence the reduced or geocentric Latitude is $55^{\circ} 46' 43''$, and the logarithm of the Earth's radius, 9.999008. For the Moon, the rigorous formula is adopted, viz.

$$\sin \text{parallax in declination} = r \times \sin \text{equatorial horizontal parallax} \times \sin (55^{\circ} 46' 43'' - \text{apparent Declination of limb})$$

r denoting the Earth's radius.

For the Sun and Planets, the small arcs were taken in place of their sines.

The horizontal parallaxes and semidiameters were taken from the Almanac, the values for the Moon being corrected as above.

The parallax and semidiameter in declination being applied according to their signs (the sign of the semidiameter being + for an observation of the south limb, and – for an observation of the north) to the apparent Declination of the Sun or Planet, given in the last column of the Observations, the result is the geocentric Declination of the centre deduced from the observation. The difference between the apparent Declination of the Moon's limb and the geocentric Declination of the centre has been found from the formula,

$$\sin \text{difference} = \sin \text{parallax in declination} \pm \sin \text{horizontal semidiameter},$$

(+ for the observations of the south limb ; – for observations of the north).

The observations of Declination of the Moon's limbs that were not fully enlightened have been corrected for the defect of illumination by the quantities mentioned in the Notes, and obtained from trigonometrical calculation.

Some of the observations of the Declinations of Venus were made upon limbs that were not fully enlightened, and, as mentioned in the Notes to the observations, and on p. 168, the defect of illumination has been allowed for by diminishing the tabular semidiameter in the proper ratio found by trigonometrical calculation.

The Declinations of the centres of the Sun and Planets for the transits over the meridian of Edinburgh have been computed from the Nautical Almanac ; and of the Moon, from the list of Moon-culminating Stars in the same work.

The signs prefixed to the differences from the Nautical Almanac, or the differences between the observed and computed places, indicate the manner in which the differences are to be applied to the computed or tabular places to obtain the observed.

*Observations of the Comet of January 1840 ; Lunar Occultations of Stars ; and
Eclipses of Jupiter's Satellites.*

These observations were made by myself.

In computing the true sidereal times, the personal equation mentioned on p. vi, has been taken into account, when the correction of the Clock depends on observations made by Mr WALLACE.

Azimuths of the Meridian Marks.

The azimuths of the Meridian marks have been determined according to the manner explained in the Introduction to the preceding Volume, pp. xxii-xxv.

SOUTH MARK.

Illuminated end of Axis West.

		s s.	(n) s.	b s.	c s.	S s.
1839,						
Jan.	7	+1.59	-0.38	+0.14	-0.10	-0.80
	11	+1.68	-0.38	+0.14	-0.10	-0.89
May	29	+1.06	-0.24	-0.02	-0.14	-0.80
June	7	+1.09	-0.25	-0.04	-0.14	-0.84
	8	+1.07	-0.27	-0.05	-0.14	-0.80
	11	+1.04	-0.26	-0.08	-0.14	-0.83
	17	+0.83	-0.16	-0.10	-0.14	-0.83
	19	+1.01	-0.24	-0.09	-0.14	-0.85
Oct.	28	+1.51	-0.40	+0.09	-0.10	-0.76
	29	+1.52	-0.42	+0.08	-0.10	-0.75
	30	+1.55	-0.41	+0.08	-0.10	-0.80
	31	+1.57	-0.49	+0.07	-0.10	-0.69
Dec.	24	+0.66	+0.11	+0.08	-0.10	-0.84
Mean,						-0.806

SOUTH MARK.

Illuminated end of Axis East.

		s s.	(n) s.	b s.	c s.	S s.
1839,						
Jan.	3	+1.69	-0.36	+0.16	+0.10	-0.71
	4	+1.67	-0.37	+0.16	+0.10	-0.67
Feb.	11	+1.65	-0.37	+0.11	+0.10	-0.74
	16	+1.63	-0.26	+0.17	+0.10	-0.90
April	29	+1.52	-0.44	+0.02	+0.13	-0.57

		s	(n)	b	c	S
		\bar{s}	\bar{n}	\bar{b}	\bar{c}	\bar{S}
1839,						
July	3	+1.38	-0.29	-0.05	+0.14	-0.80
	4	+1.36	-0.28	-0.06	+0.14	-0.81
	5	+1.35	-0.27	-0.07	+0.14	-0.83
	8	+1.31	-0.31	-0.11	+0.14	-0.78
	15	+1.29	-0.33	-0.06	+0.14	-0.65
Oct.	9	+1.67	-0.47	+0.02	+0.12	-0.68
	10	+1.63	-0.41	+0.01	+0.12	-0.76
Nov.	19	+1.57	-0.40	+0.06	+0.10	-0.67
	21	+1.65	-0.43	+0.08	+0.10	-0.66
Mean,						-0.731

NORTH MARK.

Illuminated end of Axis West.

		n	(n)	b	c	N
		\bar{n}	\bar{n}	\bar{b}	\bar{c}	\bar{N}
1839,						
Jan.	7	-1.62	-0.38	+0.14	-0.10	+0.63
	11	-1.72	-0.38	+0.14	-0.10	+0.73
	15	-1.59	-0.38	+0.14	-0.10	+0.60
Feb.	6	-1.67	-0.39	+0.15	-0.10	+0.65
March	29	-1.55	-0.39	+0.15	-0.12	+0.51
May	29	-1.15	-0.24	-0.02	-0.14	+0.61
June	7	-1.17	-0.25	-0.04	-0.14	+0.64
	8	-1.18	-0.27	-0.05	-0.14	+0.63
	11	-1.13	-0.26	-0.08	-0.14	+0.64
	17	-0.96	-0.16	-0.10	-0.14	+0.68
	19	-1.15	-0.24	-0.09	-0.14	+0.71
Oct.	15	-1.35	-0.38	+0.01	-0.10	+0.56
	17	-1.41	-0.35	+0.02	-0.10	+0.66
	20	-1.50	-0.34	+0.03	-0.10	+0.75
	25	-1.37	-0.37	+0.07	-0.10	+0.50
	28	-1.51	-0.40	+0.09	-0.10	+0.56
	29	-1.53	-0.42	+0.08	-0.10	+0.56
	30	-1.56	-0.41	+0.08	-0.10	+0.61
	31	-1.56	-0.49	+0.07	-0.10	+0.48
Nov.	5	-1.51	-0.40	+0.06	-0.10	+0.61
	7	-1.52	-0.40	+0.05	-0.10	+0.63
	10	-1.46	-0.39	+0.05	-0.10	+0.59
Dec.	21	-0.72	+0.03	+0.09	-0.10	+0.54
	24	-0.67	+0.11	+0.08	-0.10	+0.65
	25	-0.66	+0.08	+0.09	-0.10	+0.57
	28	-0.95	+0.01	+0.11	-0.10	+0.70
Mean,						+0.615

NORTH MARK.

Illuminated end of Axis East.

1839,		n $s.$	(n) $s.$	b $s.$	c $s.$	N $s.$
Jan.	3	-1.36	-0.36	+0.16	+0.10	+0.58
Feb.	9	-1.31	-0.29	+0.12	+0.10	+0.71
	11	-1.29	-0.37	+0.11	+0.10	+0.57
	16	-1.25	-0.26	+0.17	+0.10	+0.63
April	29	-1.10	-0.44	+0.02	+0.13	+0.41
July	3	-0.86	-0.29	-0.05	+0.14	+0.56
	4	-0.81	-0.28	-0.06	+0.14	+0.54
	5	-0.85	-0.27	-0.07	+0.14	+0.61
	8	-0.83	-0.31	-0.11	+0.14	+0.58
	15	-0.81	-0.33	-0.06	+0.14	+0.45
Oct.	9	-1.21	-0.47	+0.02	+0.12	+0.46
	10	-1.19	-0.41	+0.01	+0.12	+0.56
	13	-1.14	-0.38	+0.01	+0.12	+0.57
Nov.	12	-1.23	-0.34	+0.05	+0.10	+0.65
	19	-1.20	-0.40	+0.06	+0.10	+0.50
	21	-1.25	-0.43	+0.08	+0.10	+0.46
	22	-1.27	-0.39	+0.09	+0.10	+0.54
	25	-1.24	-0.33	+0.11	+0.10	+0.59
Mean,						+0.554

In these calculations the values of c are those given on p. viii. for Wire III, the values of s and n being the observed distances of that Wire from the marks.

A difference appears between the azimuths of the marks deduced from the observations made in the reversed positions of the axis. A similar difference appeared from the observations of the preceding year. This may be occasioned either by a difference between the diameters of the pivots, or by flexure in the Telescope or axis. The latter cause is the more probable, as no difference between the diameters of the pivots has been shewn by the Level. On the supposition of flexure the error of collimation may be represented by

$$c + f \cos Z$$

the illuminated end of the axis being West, and by

$$-c - f \cos Z$$

the illuminated end being East, Z denoting the Zenith distance. Therefore, in place of b in the foregoing expressions for the azimuths, there should be introduced $(b+f)$ the illuminated end being West, and $(b-f)$ the illuminated end being East. Consequently

$$S = -0.806 + f \tan L = -0.731 - f \tan L$$

L denoting the Latitude ;

whence

$$f = + 0^s.0253$$

and

$$N = + 0^s.615 - f \tan L = + 0^s.554 + f \tan L$$

whence

$$f = + 0^s.0206$$

Assigning to the two values of f weights depending on the numbers of observations, that for the first being $\frac{13 \times 14}{27} = 6.74$, and that for the second being $\frac{26 \times 18}{44} = 10.64$, there is obtained

$$f = + 0^s.0224.$$

Adding this quantity to each of the values of b in the western position of the illuminated end, and subtracting it in the eastern, there are obtained the following mean values :

$$S = - 0^s.768 = - 11''.52 : 27 \text{ observations}$$

$$N = + 0^s.584 = + 8''.76 : 44 \text{ observations.}$$

A mistake was committed in the similar investigation of the preceding year, in taking for the value of c , $\pm 0^s.12$ the error of collimation for the mean of the Wires, in place of $\pm 0^s.10$ the error of collimation for Wire III. When this error is corrected, the results from the observations of that year are

$$S = - 0^s.82 + f \tan L = - 0^s.74 - f \tan L$$

whence

$$f = + 0^s.0270 ;$$

and

$$N = + 0^s.63 - f \tan L = + 0^s.52 + f \tan L$$

whence

$$f = + 0^s.0375$$

Assigning to the two values of f weights depending on the numbers of observations, there is obtained

$$f = + 0^s.0348$$

Adding this quantity to each of the values of b in the western position of the illuminated end, and subtracting it in the eastern, there are obtained the following mean values :

$$S = - 0^s.785 = - 11''.78 : 14 \text{ observations}$$

$$N = + 0^s.574 = + 8''.61 : 37 \text{ observations}$$

Weights being assigned to the values from the observations of the two years depending on the number of observations, there are obtained

$$f = + 0^s.0273 : \text{weight } 28.67$$

$$S = - 0^s.774 = - 11''.61 : 41 \text{ observations}$$

$$N = + 0^s.579 = + 8''.69 : 81 \text{ observations}$$

Whence the South mark appears to be $0^s.774$ of time, or $11''.61$ of space, West of the meridian ; and the North mark, $0^s.579$ of time, or $8''.69$ of space, East of it.

Polar point of the Circle.

The means of all the determinations of the Declinations of the circumpolar Stars, obtained during this year, are

	Number of observations.	° ' "	Correction of Declinations. "	Relative Weight.
α Ursæ Minoris	40	88 27 3.0}	- 0.15	52
.....S. P.	50	2.7}		
Groombridge 750.....	2	85 6 58.3}	+ 0.75	28
.....S. P.	5	59.8}		
Groombridge 944.....	1	85 5 19.8}	+ 0.25	21
.....S. P.	5	20.3}		
51 (Hevelii) Cephei.....	13	87 15 47.2}	- 0.05	42
.....S. P.	6	47.1}		
Groombridge 1119	4	89 3 3.0}	+ 0.70	27
.....S. P.	2	4.4}		
Groombridge 2283	5	87 50 5.8}	+ 0.30	21
.....S. P.	1	6.4}		
δ Ursæ Minoris	18	86 35 27.9}	- 0.30	48
.....S. P.	19	27.3}		
λ Ursæ Minoris	12	88 49 33.9}	- 0.45	40
.....S. P.	5	33.0}		
Mean having regard to weights,			+ 0.03	

which may be regarded as an insensible quantity, and therefore the Polar point has been correctly assumed in the computation of the Declinations.

The above relative weights have been computed according to the calculus of probabilities, the probable error of a single observation of each Star being supposed $0''.5$, and the probable error of the mean of two Microscopes from error of division, $0''.3$.

Position of the Ecliptic.

Let x denote the correction of the Right Ascensions of all celestial objects, or the correction of the assumed position of the Equinoctial points in Right Ascension; y , the correction of the obliquity of the Ecliptic adopted in the Nautical Almanac; z , the correction of the Declinations of the Sun and other objects within the tropics, deduced from the observations; and y , the correction of the semidiameter of the Sun given in the Nautical Almanac. Then, by the method explained in the Introductions to the preceding Volumes, the following equations are obtained :

Date.	0 =	Probable Error.	Date.	0 =	Probable Error.
1839,	"	"	1839,	"	"
Jan. 2	+0.2+0.08 $x-0.98 y-z$	1.38	June 13	-1.1+0.06 $x+0.99 y-z+u$	0.93
8	-5.5+0.12 $x-0.96 y-z$	1.36	14	+1.5+0.05 $x+0.99 y-z$	0.74
9	+0.8+0.13 $x-0.96 y-z+u$	1.69	15	+0.2+0.04 $x+0.99 y-z$	0.74
12	+2.1+0.15 $x-0.94 y-z-u$	1.66	17	+1.5+0.03 $x+1.00 y-z$	0.74
14	+1.0+0.16 $x-0.93 y-z+u$	1.66	18	+2.4+0.03 $x+1.00 y-z$	0.74
15	+0.6+0.17 $x-0.92 y-z-u$	1.64	19	+3.1+0.02 $x+1.00 y-z$	0.74
16	+1.3+0.18 $x-0.91 y-z+u$	1.63	25	+1.9-0.02 $x+1.00 y-z-u$	0.93
17	-0.9+0.18 $x-0.91 y-z-u$	1.63			
23	+0.5+0.22 $x-0.86 y-z+u$	1.57	July 1	+0.4-0.06 $x+0.99 y-z$	0.74
25	-0.6+0.23 $x-0.85 y-z-u$	1.55	3	+1.3-0.08 $x+0.98 y-z$	0.74
26	+0.5+0.24 $x-0.84 y-z+u$	1.54	4	+1.9-0.08 $x+0.98 y-z$	0.74
30	-0.2+0.26 $x-0.80 y-z-u$	1.49	5	+0.9-0.09 $x+0.98 y-z$	0.74
			8	+0.9-0.11 $x+0.97 y-z$	0.74
Feb. 5	+4.4+0.30 $x-0.72 y-z+u$	1.42	9	+1.8-0.11 $x+0.96 y-z+u$	0.93
6	+0.9+0.31 $x-0.71 y-z-u$	1.41	13	+1.8-0.14 $x+0.95 y-z-u$	0.93
7	+3.1+0.31 $x-0.70 y-z+u$	1.40	25	+0.5-0.21 $x+0.87 y-z+u$	0.93
15	+0.7+0.35 $x-0.59 y-z-u$	1.30	26	+1.9-0.22 $x+0.86 y-z$	0.74
18	+1.4+0.36 $x-0.55 y-z+u$	1.27	29	+0.9-0.24 $x+0.84 y-z+u$	0.93
19	-0.8+0.37 $x-0.53 y-z-u$	1.26	30	+2.8-0.25 $x+0.83 y-z$	0.74
22	-1.1+0.38 $x-0.49 y-z+u$	1.22			
23	-0.9+0.38 $x-0.47 y-z-u$	1.21	Aug. 1	+0.4-0.26 $x+0.81 y-z$	0.74
25	+2.1+0.39 $x-0.43 y-z+u$	1.19			
26	-1.2+0.40 $x-0.42 y-z-u$	1.17	Sept. 13	+1.7-0.43 $x+0.19 y-z$	0.78
27	+0.7+0.40 $x-0.40 y-z+u$	1.16	19	+2.2-0.43 $x+0.08 y-z+u$	0.98
			21	+1.7-0.43 $x+0.04 y-z+u$	0.98
Mar. 1	-1.5+0.41 $x-0.36 y-z-u$	1.14	23	+1.9-0.43 x $-z-u$	0.99
4	+1.8+0.41 $x-0.31 y-z+u$	1.11	24	+2.6-0.43 $x-0.01 y-z+u$	0.99
12	-0.3+0.43 $x-0.17 y-z-u$	1.05	26	+0.1-0.43 $x-0.05 y-z-u$	1.00
13	+0.2+0.43 $x-0.14 y-z+u$	1.04			
19	+0.4+0.43 $x-0.03 y-z$	0.79	Oct. 2	+0.1-0.43 $x-0.17 y-z-u$	1.05
22	-1.0+0.43 $x+0.02 y-z-u$	0.98	3	+2.8-0.43 $x-0.19 y-z+u$	1.06
25	+0.7+0.43 $x+0.08 y-z-u$	0.98	5	+1.3-0.42 $x-0.22 y-z-u$	1.07
26	+2.0+0.43 $x+0.09 y-z$	0.78	7	+0.2-0.42 $x-0.26 y-z+u$	1.09
30	+0.2+0.43 $x+0.18 y-z$	0.78	9	-1.8-0.42 $x-0.29 y-z-u$	1.10
			10	-0.2-0.41 $x-0.30 y-z+u$	1.10
April 8	-0.1+0.41 $x+0.33 y-z$	0.77	11	+1.6-0.41 $x-0.32 y-z-u$	1.12
11	+1.5+0.40 $x+0.39 y-z$	0.77	15	-1.6-0.40 $x-0.40 y-z+u$	1.17
12	-0.8+0.40 $x+0.40 y-z$	0.77	18	+0.2-0.39 $x-0.44 y-z-u$	1.19
20	+0.2+0.37 $x+0.53 y-z$	0.76	19	+0.5-0.38 $x-0.46 y-z+u$	1.20
24	+0.1+0.35 $x+0.59 y-z$	0.76	25	-0.1-0.36 $x-0.56 y-z-u$	1.27
27	-1.4+0.34 $x+0.63 y-z$	0.75	28	+1.0-0.35 $x-0.60 y-z+u$	1.31
			30	+0.8-0.34 $x-0.63 y-z-u$	1.34
May 1	-0.6+0.32 $x+0.68 y-z-u$	0.94			
2	-0.1+0.31 $x+0.69 y-z$	0.75	Nov. 9	-0.1-0.29 $x-0.76 y-z+u$	1.45
11	+1.2+0.26 $x+0.80 y-z$	0.74	11	+2.1-0.27 $x-0.78 y-z-u$	1.47
17	-0.8+0.23 $x+0.86 y-z-u$	0.93	12	+4.8-0.27 $x-0.79 y-z+u$	1.48
20	+1.3+0.21 $x+0.88 y-z+u$	0.93	20	-0.3-0.22 $x-0.86 y-z-u$	1.56
24	+0.7+0.18 $x+0.91 y-z-u$	0.93	23	-0.5-0.20 $x-0.89 y-z+u$	1.61
25	+3.6+0.18 $x+0.91 y-z+u$	0.93	27	-0.5-0.17 $x-0.92 y-z-u$	1.64
27	+0.3+0.16 $x+0.93 y-z$	0.74			
28	-0.2+0.16 $x+0.93 y-z$	0.74	Dec. 6	+2.8-0.11 $x-0.96 y-z+u$	1.70
29	+1.8+0.15 $x+0.94 y-z$	0.74	7	-0.6-0.11 $x-0.97 y-z-u$	1.71
30	-0.8+0.15 $x+0.94 y-z+u$	0.93	21	-0.1-0.01 $x-1.00 y-z+u$	1.75
			23	+1.8+0.01 $x-1.00 y-z-u$	1.75
June 1	+0.3+0.13 $x+0.95 y-z$	0.74	25	-0.4+0.02 $x-1.00 y-z+u$	1.75
5	+2.0+0.11 $x+0.97 y-z$	0.74	26	-2.1+0.03 $x-1.00 y-z-u$	1.75
11	+1.6+0.07 $x+0.99 y-z$	0.74	28	-1.3+0.04 $x-0.99 y-z+u$	1.75

On resolving these equations by the method of *minimum* squares, final equations are obtained :

$$\begin{aligned} 0 &= -5.47 + 8.820x + 2.460y - 5.510z - 1.577u \\ 0 &= +49.91 + 2.460x + 59.260y - 37.194z + 2.089u \\ 0 &= -83.11 - 5.510x - 37.194y + 106.139z - 1.654u \\ 0 &= +22.46 - 1.577x + 2.089y - 1.654z + 50.014u \end{aligned}$$

Whence, by elimination,

$$\begin{array}{lcl} x = & +1.10 & \dots\dots\dots \text{Weight, } 8.53 \\ y = & -0.45 & \dots\dots\dots 46.14 \\ z = & +0.68 & \dots\dots\dots 80.97 \\ u = & -0.37 & \dots\dots\dots 49.61 \end{array} \left. \vphantom{\begin{array}{l} x \\ y \\ z \\ u \end{array}} \right\} \begin{array}{l} \text{observations, each having a} \\ \text{probable error of } 1''. \end{array}$$

It therefore appears, from the observations of this year, that the Right Ascensions of the Sun, Stars, and all objects, should be increased by $1''.10$ of space or $0^s.07$ of time, for the correction of the assumed position of the Equinoctial points ; that the obliquity of the Ecliptic adopted in the Nautical Almanac should be diminished by $0''.45$, whence the obliquity for the beginning of 1839, deduced from the observations, is $23^\circ 27' 36''.53$; that the northern Declinations of the Sun and bodies within the tropics, given by the Circle and the assumed elements of reduction, should be increased by $0''.68$, and the southern Declinations diminished by the same quantity ; and that the Sun's semidiameter in the Nautical Almanac, taken from the *Tabulae Regiomontanae*, should be diminished by $0''.37$, to satisfy the observations of both limbs made with the Circle on different days.

The means of the various values of x , y , and u deduced from the observations of 1834–9, having regard to the weights, are

$$\begin{array}{lcl} x = & +0.90 & \dots\dots\dots \text{Weight, } 47.36 \\ y = & -0.12 & \dots\dots\dots 207.72 \\ u = & -0.32 & \dots\dots\dots 391.58 \end{array}$$

Whence it appears from the observations of 1834–9 that the Right Ascensions of all objects should be increased by $0''.90$ of space, or $0^s.06$ of time, for the correction of the Equinoctial points ; that the obliquity of the Ecliptic adopted in the Nautical Almanac should be diminished by $0''.12$; and that the Sun's diameter in the Nautical Almanac and *Tabulae Regiomontanae* should be diminished by $0''.64$, to satisfy the observations of both limbs made with the Circle on different days.

The Sun's Diameter.

The mean difference between the observed sidereal times of the Sun's diameter passing the meridian and the quantities given in the Nautical Almanac, is,

From the observations of 1834-5	+ 0.04.....172	observations.
1836	0.00.....153	
1837	- 0.08.....151	
1838	- 0.05.....141	
1839	- 0.08.....132	
Mean,	- 0.03.....749	

corresponding to a correction of $-0''.43$ in the value of the Sun's horizontal diameter.

The mean difference between the vertical diameters of the Sun measured with the Mural Circle and the quantities given in the Nautical Almanac is,

From the observations of 1837	- 1.60.....12	observations.
1838	- 0.12.....54	
1839	+ 0.11.....34	
Mean,	- 0.22 100	

From the Circle-observations discussed under the preceding title, the correction of the Sun's diameter has been found to be $-0''.64$.

Assigning to the first value the relative weight 51.8, and to the second, 97.9, (found from the calculus of probabilities), the correction of the Sun's vertical diameter becomes $-0''.49$.

On the whole it appears that both the Transit Instrument and Mural Circle make the Sun's diameter about a half second of space less than the value adopted in the Nautical Almanac and *Tabulæ Regiomontanæ*.

The Moon's Diameter.

Observed Sidereal times of the Moon's Diameter passing the Meridian.

1. BRIGHT LIMBS.

Date.	Observed Time.	Difference from Nautical Almanac.
1839, March 29	$\begin{matrix} m. & s. \\ 2 & 1.69 \end{matrix}$	$\begin{matrix} s. \\ +0.07 \end{matrix}$
Mean of 13 observations, }	$\begin{matrix} 2 & 19.83 \end{matrix}$	$\begin{matrix} +0.27 \end{matrix}$
2. BRIGHT AND DARK LIMBS.		
1839, January 7	$\begin{matrix} m. & s. \\ 2 & 4.02 \end{matrix}$	$\begin{matrix} s. \\ +0.18 \end{matrix}$
8	$\begin{matrix} 2 & 7.40 \end{matrix}$	$\begin{matrix} +0.20 \end{matrix}$
December 27	$\begin{matrix} 2 & 4.14 \end{matrix}$	$\begin{matrix} +0.04 \end{matrix}$
28	$\begin{matrix} 2 & 5.62 \end{matrix}$	$\begin{matrix} +0.26 \end{matrix}$
Mean of 12 observations, }	$\begin{matrix} 2 & 9.09 \end{matrix}$	$\begin{matrix} +0.06 \end{matrix}$

Vertical Diameter of the Moon observed with the Mural Circle.

Date.	Vertical Diameter of the Moon from observation.	Difference from Nautical Almanac.
1839,	' "	"
February 22	31 18.0	+2.3
April 27	29 29.5	+6.2
September 22	32 53.5	+2.0
November 19	33 29.8	+6.5
December 21	32 36.4	+1.9
Mean of 11 ob- servations, }	31 37.7	+3.2

The mean results comprehend the observations of preceding years, given in the Introduction to the preceding Volume, pp. xxxi-xxxii.

The defect of illuminated disc has been allowed for as mentioned in the Notes to the observations.

The vertical diameters of the Moon deduced from the observations with the Mural Circle are the quantities, which being employed in the calculations make the geocentric Declinations of the Moon's Centre, obtained from the observations of both limbs, agree.

From the observations of the bright limbs made with the Transit Instrument and Mural Circle, it appears that the Moon's diameter, computed from BURKHARDT'S Tables, should be increased in the following proportions:

Transit Instrument,.....	1 : 1.00193
Mural Circle,.....	1 : 1.00169

Mean, 1 : 1.00181

corresponding to an increase of $\frac{1}{252}$ part.

From the observations of the dark limb when visible made with the Transit Instrument, and from the result of the observations of the Solar Eclipse on May 15, 1836, there appears to be no increase required of the diameter of the non-illuminated disc, but rather a small diminution. This seems to indicate that the apparent increase of the diameter of the illuminated disc is caused by irradiation.

Observations of the Sun.

The mean difference between the Sun's observed and tabular Right Ascensions is,

From winter Solstice 1838 to spring Equinox 1839,	^{s.} + 0.13	44 observations.
From spring Equinox to summer Solstice 1839,	+ 0.10	37
From summer Solstice to autumnal Equinox 1839,	+ 0.10	40
From autumnal Equinox to winter Solstice 1839,	− 0.03	31
and		
From winter Solstice 1838 to winter Solstice 1839,	+ 0.08	152

Observations of the Moon.

The mean difference between the observed and tabular Right Ascensions of the Moon (excluding the observations of the dark limb) is,

First limb,	54 observations,	^{s.} − 0.32
Second limb,	25	− 0.50
Mean of the	79	− 0.38

The mean difference between the observed and tabular Declinations of the Moon is,

North limb,	34 observations,	" − 0.7
• South limb,	32	− 2.4
Mean of the	66	− 1.5

Oppositions and Inferior Conjunctions of the Planets.

The corrections of the Planets' places have been determined in the manner explained in the Introduction to Vol. I.

Inferior Conjunction of Venus, October 5, 1839.

Correction of Sun's Right Ascension, = $-0^s.03$, mean of 15 observations, Sept. 21—Oct. 17.

Whence

Correction of Sun's Longitude, = $-0''.5$.

[illegible]

Correction of Planet's Geocentric Right Ascension, $-0^{\text{s}}.06$: 12 observations, Feb. 27—March 25.
 ----- Declination, $-2''.0$: 10 ----- Feb. 27—March 25.
 ----- Sun's Right Ascension, $+0^{\text{s}}.17$: 9 ----- Feb. 27—March 25.

Opposition of Vesta, December 29, 1838.

Correction of Planet's Geocentric Right Ascension, $-0^{\circ}.07$:	11 observations,	Dec. 17—Jan. 14.
..... Declination,	$+20''.6$:	10 Dec. 17—Jan. 14.
..... Sun's Right Ascension,	$+0^{\circ}.02$:	13 Dec. 17—Jan. 14.

Opposition of Juno, October 12, 1839.

Correction of Planet's Geocentric Right Ascension, —	1 ^h .91 : 10 observations,	Sept. 28—Oct. 19.
Declination,.....	—15''3 : 10	Sept. 28—Oct. 19.
Sun's Right Ascension,	— 0 ^h .01 : 12	Sept. 30—Oct. 19.

Whence	Correction of Planet's Geocentric Longitude,	— 33.0
	Latitude,...	— 3.4
	Sun's Longitude,.....	— 0.2
	Planet's Heliocentric Longitude,	— 17.0
	Latitude, —	1.8

Opposition of Pallas, March 31, 1839.

Correction of Planet's Geocentric Right Ascension, $-22^{\circ}87$: 8 observations, March 18—April 10.
 ----- Declination,..... $+3''.1$: 6 ----- March 18—April 10.
 ----- Sun's Right Ascension, $+0^{\circ}24$: 8 ----- March 19—April 10.

Whence Correction of Planet's Geocentric Longitude, -325.7
 ----- Latitude, ... -131.3
 ----- Sun's Longitude, $+3.9$
 ----- Planet's Heliocentric Longitude, -187.6
 ----- Latitude, -83.0

Opposition of Ceres, April 6, 1839.

Correction of Planet's Geocentric Right Ascension, $+1^{\circ}45$: 10 observations, March 21—April 20.
 ----- Declination, $-20''.3$: 6 ----- March 21—April 20.
 ----- Sun's Right Ascension, $+0^{\circ}18$: 10 ----- March 22—April 20.

Whence Correction of Planet's Geocentric Longitude, $+28.8$
 ----- Latitude, ... -10.4
 ----- Sun's Longitude, $+2.9$
 ----- Planet's Heliocentric Longitude, $+18.7$
 ----- Latitude, -6.6

Opposition of Jupiter, April 3, 1839.

Correction of Planet's Geocentric Right Ascension, $+0^{\circ}61$: 11 observations, March 18—April 19.
 ----- Declination, $-1''.3$: 9 ----- March 18—April 18.
 ----- Sun's Right Ascension, $+0^{\circ}20$: 10 ----- March 19—April 12.

Whence Correction of Planet's Geocentric Longitude, $+8.9$
 ----- Latitude, ... $+2.3$
 ----- Sun's Longitude, $+3.2$
 ----- Planet's Heliocentric Longitude, $+7.9$
 ----- Latitude, $+1.9$

Opposition of Saturn, May 28, 1839.

Correction of Planet's Geocentric Right Ascension, $+0^{\circ}52$: 11 observations, May 13—June 13.
 ----- Declination, $+17''.1$: 8 ----- May 13—June 13.
 ----- Sun's Right Ascension, $+0^{\circ}07$: 14 ----- May 17—June 13.

Whence Correction of Planet's Geocentric Longitude, $+4.4$
 ----- Latitude, ... $+18.1$
 ----- Sun's Longitude, $+1.0$
 ----- Planet's Heliocentric Longitude, $+4.1$
 ----- Latitude, $+16.3$

Opposition of Uranus, September 7, 1839.

Correction of Planet's Geocentric Right Ascension, $-5^{\circ}18$: 16 observations, Aug. 24—Sept. 23.
 ----- Declination, $-20''.5$: 5 ----- Sept. 13—22.
 ----- Sun's Right Ascension, $+0^{\circ}10$: 12 ----- Aug. 26—Sept. 23.

Whence	Correction of Planet's Geocentric Longitude, ^{''} - 79.1
	----- Latitude, ... + 10.9
	----- Sun's Longitude, + 1.6
	----- Planet's Heliocentric Longitude, - 75.1
	----- Latitude, + 10.4

Longitude of the Observatory.

By Occultations of Stars.

The Occultations observed during this year, of which corresponding observations have been obtained made at Greenwich and Cambridge, have been calculated according to the method mentioned in the Introduction to the preceding Volume, pp. xxxv-xxxvi. The corrections applied to the sidereal times of the observations at Greenwich and Cambridge, for the mean differences between the Right Ascensions of the Stars employed there for the determination of the times, and the Right Ascensions employed here, are

Greenwich,	^{s.} - 0.05
Cambridge,	- 0.08

All the observations are of immersions at the Moon's dark limb.

February 23, 1839. Immersion of 47 Geminorum.

Edinburgh,	^{h.} 8 ^{m.} 50 ^{s.} 50.2	sidereal time.
Greenwich,	9 15 6.53	-----
Cambridge,	9 13 59.70	-----
Apparent Right Ascension of Star,	^{h.} 105 ^{m.} 21 ^{s.} 20.55	
----- Declination,	+ 27 7 0.2	
Correction of Nautical Almanac—		
Moon's Right Ascension,		- 12.9
----- Declination,		+ 0.4
Difference of Longitude—		
Greenwich and Edinburgh, ^{m.} 12 ^{s.} 43.37		
Cambridge and Edinburgh, 13 5.66		

October 19, 1839. Immersion of 96 Aquarii.

Edinburgh,	^{h.} 21 ^{m.} 53 ^{s.} 39.7	sidereal time.
Greenwich,	22 4 26.66	-----
Cambridge,	22 5 46.26	-----

Apparent Right Ascension of Star,	347 46 40.35
Declination,	- 5 59 49.6
Correction of Nautical Almanac—	
Moon's Right Ascension,.....	+ 1.35
Declination,	- 4.5
Difference of Longitude—	
Greenwich and Edinburgh, ^{m.} 12 ^{s.} 42.02	
Cambridge and Edinburgh, 13 6.21	

The means of these determinations, and of those given in the preceding Volume, are

Difference of Longitude—	
Greenwich and Edinburgh,	^{m.} 12 ^{s.} 42.68 : 4 observations.
Cambridge and Edinburgh,	13 5.79 : 8

Reduced observations of the Comet of ENCKE made in November 1838.

The original observations are given in the preceding Volume.

From the Catalogue of the mean positions of Stars given in this Volume, the apparent places of the Stars, with which the Comet was compared, are computed to be as follows :

Date.	Star.	Apparent Right Ascension.	Apparent Declination.
1838, Nov. 10	<i>a</i>	^{h.} 17 ^{m.} 50 ^{s.} 2.50	+ 41 30 12.1
12	<i>b</i>	17 20 57.79	34 50 6.3
	<i>c</i>	17 23 41.36	35 4 8.0
	<i>d</i>	17 28 57.77	34 51 37.8
	<i>e</i>	17 26 5.76	34 56 32.7
13	<i>f</i>	17 15 28.85	32 1 26.0
	<i>g</i>	17 16 1.44	32 8 41.4
14	<i>h</i>	17 11 28.04	28 54 36.5
19	<i>i</i>	16 42 38.03	15 39 39.9
	<i>k</i>	16 43 54.00	16 4 22.9

The observed differences of Right Ascension and Declination between the Comet and Stars being applied to the apparent places of the Stars, the apparent places of the Comet are obtained, and the means of the determinations of each day and of the corresponding times are taken, for the result of that day. In taking the means of the observations of Right Ascension, when two Stars have been observed with the Comet, the weight $1\frac{1}{3}$ is allowed to the result. The Comet's parallaxes are then applied, and the resulting Geocentric positions are compared with the Ephemeris published in *Astronomische Nachrichten*, No. 375. The results are contained in the subjoined Table :

Date.	Sidereal Time.	Parallax in		Comet's Geocentric Right Ascension.	Weight.	Comet's Geocentric Declination.	Weight.	Difference from Ephemeris	
		Right Ascen.	Declin.					Right Ascension.	Declination.
1838,	<i>h. m. s.</i>	<i>s.</i>	<i>"</i>	<i>h. m. s.</i>		<i>° ' "</i>		<i>s.</i>	<i>"</i>
Nov. 10	23 31 54	+1.9	...	17 46 38.1	4	.....	...	-2.4	.....
	0 7 2	...	+25	.....	...	+41 28 9	2	.....	-46
12	23 41 43	1.7	...	17 26 20.7	4½	.....	...	-1.5	.....
	0 15 39	...	27	.....	...	34 58 7	3	.....	+53
13	23 23 12	1.6	...	17 18 1.3	6	.....	...	-0.8	.....
	23 27 2	...	25	.....	...	31 55 15	2	.....	-18
14	23 41 43	1.5	...	17 10 22.2	4	.....	...	-0.8	.....
	0 5 21	...	27	.....	...	28 49 25	1	.....	+8
19	22 21 2	1.1	...	16 42 17.8	4	.....	...	-0.6	.....
	22 33 3	...	23	.....	...	15 50 7	3	.....	+30

The differences from the Ephemeris in Right Ascension being converted into space and multiplied by the cosines of the Declinations, and the mean results, and also the mean differences from the Ephemeris in Declination, and the means of the corresponding times according to the weights being taken, there are obtained the following results, which express the mean corrections of the Ephemeris in Right Ascension reduced to a great circle, and in Declination, deduced from all the observations, the dates being given in mean solar time at Berlin :

Date.	d.	"
Nov.	13.89	- 14 : Correction of Ephemeris in Right Ascension.
	14.29	+ 12 : Declination.

ERRATA.

VOL. I. 1834-5.

Page xxvii, line 10, for $(T) + \tau + n \tan D - c (\sec D + 1)$ read $(T) + \tau - n \tan D - c (\sec D + 1)$.

VOL. IV. 1838.

Page xix, line 12 from bottom, for *a Aquarii* read *α Aquarii*.

xxx, line 7, for 0''03 read 0''3.

xxxii, line 2, for Horizontal Diameter read Vertical Diameter ; and line 15, for horizontal diameters read vertical diameters.

24, May 8, }
91, column 2, } for γ Libræ read 20 Libræ.
164, No. 1705, }

VOL. V. 1839.

Page vi, line 19, after This personal equation has not been applied in any instance, insert (except in the observation of Venus on October 15).

x, line 9, for *b* sec Latitude read $(b + 0''.028)$ sec Latitude.

xxxii, line 15, Correction of Planet's Heliocentric Longitude, for $-7''.0$ read $-7''.1$.

5, Jan. 11, A. S. C. 373, for 16^m read 15^m ; and for 18^m read 17^m.

7, Jan. 15, A. S. C. 373, for 17^m read 16^m ; and for 18^m read 17^m.

35, May 10, Ceres, for $+5''.18$ read $+4''.18$.

38, May 27, Moon 1 Limb, for 49^m read 48^m ; and for 50^m read 49^m.

83, Column 4, ι Tauri, for Jan. 29 read Jan. 24.

124, Sept. 26, α Ursæ Minoris S. P., delete the mark of reference (*d*).

OBSERVATIONS
MADE WITH
THE TRANSIT INSTRUMENT
IN THE YEAR 1839.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Jan. 1	30 Ceti.....	18.0	31.5	45.2	58.5	12.1	m. 58	s. 45.06	+ 0.98	.....	+ 54.66	h. 0 m. 59 s. 40.70
	♄ ³ Piscium.....	49.8	3.7	17.8	31.8	45.8	0	17.78	+ 0.78	.....	+ 54.66	1 1 13.22
	α Ursæ Minoris.....	.....	.....	.....	7.0	21.5	0	53.85	- 9.23	.....	+ 54.66	1 1 39.28
	χ Piscium.....	24.7	39.0	53.2	7.5	21.5	1	53.18	+ 0.77	.....	+ 54.66	1 2 48.61
	θ ¹ Ceti.....	36.4	49.8	3.4	16.7	30.2	15	3.30	+ 0.96	+ 54.71	+ 54.68	1 15 58.94
	ζ Ceti.....	8.7	22.2	35.7	49.3	2.8	42	35.74	+ 0.97	.....	+ 54.71	1 43 31.42
	γ Arietis.....	29.2	43.6	57.8	12.3	26.7	45	57.92	+ 0.75	.....	+ 54.71	1 46 53.38
	α Arietis.....	42.6	57.1	11.5	25.8	40.3	57	11.46	+ 0.75	54.78	+ 54.73	1 58 6.94
	β Trianguli.....	31.7	47.8	4.0	19.8	35.8	59	3.82	+ 0.67	.....	+ 54.73	1 59 59.22
	γ Trianguli.....	37.2	52.4	7.6	23.1	38.3	2	7.72	+ 0.71	.....	+ 54.73	2 3 3.16
	α Ceti.....	30.7	43.9	57.4	10.7	23.9	52	57.32	+ 0.87	54.75	+ 54.79	2 53 52.98
	φ ³ Eridani.....	0.5	14.0	27.4	40.8	54.4	55	27.42	+ 0.96	.....	+ 54.79	2 56 23.17
	ζ Eridani.....	39.2	52.7	6.1	19.6	33.0	7	6.12	+ 0.97	.....	+ 54.81	3 8 1.90
	95 Ceti.....	47.1	0.4	13.6	26.8	40.2	9	13.62	+ 0.91	.....	+ 54.81	3 10 9.34
	χ ² Ceti.....	20.5	33.8	47.0	0.4	13.7	11	47.08	+ 0.88	.....	+ 54.81	3 12 42.77
	A. S. C. 371.....	19.0	45.2	11.0	37.0	3.4	15	11.12	+ 0.37	.....	+ 54.82	3 16 6.31
	σ Persei.....	41.7	1.2	20.8	40.5	0.2	18	20.88	+ 0.55	.....	+ 54.82	3 19 16.25
	17 Eridani.....	16.6	29.8	43.2	56.6	9.8	21	43.20	+ 0.94	.....	+ 54.82	3 22 38.96
	♄ Persei.....	30.6	50.6	10.4	30.0	49.8	24	10.28	+ 0.54	.....	+ 54.82	3 25 5.64
	20 Eridani.....	35.0	48.8	2.7	16.6	30.7	28	2.76	+ 1.03	.....	+ 54.83	3 28 58.62
	21 Eridani.....	43.0	56.4	9.6	23.0	36.4	30	9.68	+ 0.94	.....	+ 54.83	3 31 5.45
	A. S. C. 400.....	48.3	4.0	19.7	35.4	51.1	33	19.70	+ 0.69	.....	+ 54.83	3 34 15.22
	* Pleiad. D. + 23° 14'	22.2	36.6	51.0	5.5	19.9	36	51.04	+ 0.74	.....	+ 54.84	3 37 46.62
	26 Tauri (Pleiadum)	0.1	14.6	29.1	43.5	58.0	38	29.06	+ 0.74	.....	+ 54.84	3 39 24.64
	31 Tauri.....	4.0	17.4	30.8	44.3	57.6	42	30.82	+ 0.86	.....	+ 54.84	3 43 26.52
	32 Eridani.....	51.4	4.7	17.9	31.0	44.6	45	17.92	+ 0.93	.....	+ 54.85	3 46 13.70
	γ ¹ Eridani.....	9.2	22.8	36.6	50.3	4.0	49	36.58	+ 1.00	54.76	+ 54.85	3 50 32.43
	γ Tauri.....	14.6	28.0	41.2	54.6	8.1	53	41.30	+ 0.86	.....	+ 54.85	3 54 37.01
	α Tauri.....	19.2	33.1	46.6	0.5	14.3	25	46.74	+ 0.80	54.95	+ 54.88	4 26 42.42
	δ Orionis.....	25.8	39.2	52.5	5.7	19.0	22	52.44	+ 0.90	54.99	+ 54.94	5 23 48.28
	δ Ursæ Min. S. P.....	24.0	7.0	51.0	.....	.....	22	50.63	+ 5.33	.....	+ 55.00	6 23 50.96
	δ Ursæ Minoris.....	31.5	15.0	57.5	41.5	24.0	22	57.90	- 3.58	.....	+ 55.73	18 23 50.05
Jan. 2	Sun 1 Limb.....	.....	.....	.....	6.5	20.9	47	52.01	+ 1.04	.....	+ 55.76	18 48 48.81
	Sun 2 Limb.....	44.8	.....	14.0	.....	42.8	50	13.86	+ 1.04	.....	+ 55.76	18 51 10.66
	α Aquilæ.....	30.8	44.2	57.6	11.0	24.5	41	57.62	+ 0.82	+ 55.87	+ 55.82	19 42 54.26
	β Aquilæ.....	59.7	13.0	26.4	39.7	53.1	46	26.38	+ 0.84	55.74	+ 55.82	19 47 23.04
	ζ Cygni.....	36.7	51.8	7.2	22.5	37.7	5	7.18	+ 0.69	55.89	+ 55.90	21 6 3.77
	β Aquarii.....	40.4	53.6	6.8	20.3	33.7	22	6.96	+ 0.92	55.92	+ 55.92	21 23 3.80
	α Aquarii.....	6.5	19.7	33.1	46.4	59.7	56	33.08	+ 0.89	55.98	+ 55.95	21 57 29.92
	Uranus.....	37.1	50.5	3.8	17.4	30.7	44	3.90	+ 0.94	.....	+ 56.00	22 45 0.84
	λ Cassiopeæ.....	13.3	35.7	58.0	20.5	42.8	21	58.06	+ 0.46	.....	+ 56.10	0 22 54.62
	55 Piscium.....	2.4	16.4	30.6	44.7	59.0	30	30.62	+ 0.75	.....	+ 56.11	0 31 27.48
	η Cassiopeæ.....	37.9	2.3	26.8	51.4	15.5	38	26.78	+ 0.41	.....	+ 56.12	0 39 23.31
	66 Piscium.....	39.4	53.4	7.4	21.4	35.4	45	7.40	+ 0.76	.....	+ 56.13	0 46 4.29
	φ ³ Ceti.....	32.8	46.5	0.4	13.9	27.3	47	0.18	+ 0.96	.....	+ 56.13	0 47 57.27
	25 Ceti.....	30.4	43.8	57.3	10.6	24.0	53	57.22	+ 0.92	.....	+ 56.13	0 54 54.27
	27 Ceti.....	9.1	22.7	36.3	49.8	3.4	56	36.26	+ 0.95	.....	+ 56.14	0 57 33.35
	30 Ceti.....	16.8	30.2	43.6	57.3	10.6	58	43.70	+ 0.95	.....	+ 56.14	0 59 40.79
	♄ ³ Piscium.....	48.3	2.4	16.4	30.5	44.6	0	16.44	+ 0.76	.....	+ 56.14	1 1 13.34
	α Ursæ Minoris.....	.....	37.0	.....	5.0	18.0	0	51.00	- 8.87	.....	+ 56.14	1 1 38.27
	χ Piscium.....	23.5	37.6	51.7	5.8	20.0	1	51.72	+ 0.76	.....	+ 56.14	1 2 48.62
	44 Ceti.....	33.2	46.5	0.1	13.5	26.8	15	0.02	+ 0.94	.....	+ 56.16	1 15 57.12
	33 Arietis.....	51.4	6.3	21.0	35.7	50.4	30	20.96	+ 0.71	.....	+ 56.24	2 31 17.91
	35 Arietis.....	34.9	49.8	4.8	19.7	34.6	33	4.76	+ 0.71	.....	+ 56.24	2 34 1.71
	39 Arietis.....	53.5	8.6	24.1	39.3	54.5	37	24.00	+ 0.70	.....	+ 56.24	2 38 20.94
	τ Persei.....	13.7	35.5	57.2	18.5	40.4	41	57.06	+ 0.49	.....	+ 56.25	2 42 53.80
	γ Persei.....	30.8	52.7	14.8	37.0	59.1	52	14.88	+ 0.47	.....	+ 56.26	2 53 11.61

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
Jan. 2	φ^3 Eridani.....	<i>s.</i> 59.4	<i>s.</i> 12.6	<i>s.</i> 26.2	<i>s.</i> 39.6	<i>s.</i> 52.8	<i>m. s.</i> 55 26.12	<i>s.</i> + 0.94	<i>s.</i>	<i>s.</i> + 56.26	<i>h. m. s.</i> 2 56 23.32
	95 Ceti.....	45.5	58.8	12.3	25.5	38.8	9 12.18	+ 0.89	.....	+ 56.28	3 10 9.35
	π^2 Ceti.....	19.0	32.2	45.6	59.1	12.4	11 45.66	+ 0.86	.....	+ 56.28	3 12 42.80
	Groombridge 642.....	17.0	33.5	50.5	7.0	24.5	13 50.50	- 3.05	.....	+ 56.28	3 14 43.73
	17 Eridani.....	15.0	28.4	41.7	55.3	8.5	21 41.78	+ 0.92	.....	+ 56.29	3 22 38.99
	ϵ Eridani.....	57.7	11.4	24.8	38.2	51.7	24 24.76	+ 0.95	.....	+ 56.29	3 25 22.00
	21 Eridani.....	41.5	54.8	8.4	21.7	35.1	30 8.30	+ 0.92	.....	+ 56.30	3 31 5.52
	A. S. C. 400.....	47.0	2.7	18.3	33.8	49.4	33 18.24	+ 0.68	.....	+ 56.30	3 34 15.22
	* Pleiad. D. + 23° 14'	20.5	35.2	49.6	4.1	18.5	36 49.58	+ 0.73	.....	+ 56.31	3 37 46.62
	26 Tauri (Pleiad.).....	58.4	13.1	27.7	41.9	56.5	38 27.52	+ 0.73	.....	+ 56.31	3 39 24.56
	31 Tauri.....	2.5	15.8	29.3	42.7	56.1	42 29.28	+ 0.84	.....	+ 56.31	3 43 26.43
	32 Eridani.....	49.8	3.1	16.4	29.7	43.1	45 16.42	+ 0.91	.....	+ 56.32	3 46 13.65
	ν Tauri.....	12.8	26.3	39.7	53.1	6.4	53 39.66	+ 0.85	.....	+ 56.32	3 54 36.83
	Groombridge 944.....	15.0	50.0	25.5	0.5	36.5	10 25.50	- 2.24	.....	+ 56.40	5 11 19.66
	δ Ursæ Min. S. P.....	22.0	5.5	48.5	.....	14.0	22 48.38	+ 5.14	.....	+ 56.48	6 23 50.00
	Vesta.....	51.2	5.5	19.8	34.2	48.6	26 19.86	+ 0.73	.....	+ 56.49	6 27 17.08
Jan. 3	ϕ^3 Ceti.....	31.4	44.7	58.5	12.3	25.9	46 58.56	+ 0.97	.....	+ 57.63	0 47 57.16
	28 Ceti.....	35.4	48.9	2.5	15.7	29.4	57 2.38	+ 0.96	.....	+ 57.64	0 58 0.98
	β Andromedæ.....	13.4	29.6	45.7	1.9	18.2	59 45.76	+ 0.66	.....	+ 57.65	1 0 44.07
	α Ursæ Minoris.....	20.5	35.0	.....	2.0	17.0	0 48.70	- 8.86	.....	+ 57.65	.....
	θ^1 Ceti.....	33.1	46.6	0.3	13.8	27.2	15 0.20	+ 0.95	+ 57.80	+ 57.66	1 15 58.81
	α Tauri.....	16.4	30.2	.....	57.7	11.6	25 43.98	+ 0.80	57.71	+ 57.85	4 26 42.63
Jan. 4	α Cygni.....	18.0	36.7	55.5	14.0	32.7	34 55.38	+ 0.49	+ 58.77	+ 58.77	.....
	25 Ceti.....	17.6	40.9	54.4	7.7	21.2	53 54.36	+ 0.86	.....	+ 59.00	0 54 54.22
	28 Ceti.....	33.7	47.3	0.8	14.4	28.1	57 0.86	+ 0.89	.....	+ 59.00	0 58 0.75
	η Ceti.....	2.7	16.2	29.8	43.4	57.1	59 29.84	+ 0.89	.....	+ 59.00	1 0 29.73
	α Ursæ Minoris.....	20.0	32.0	.....	1.0	15.0	0 47.08	- 9.31	.....	+ 59.00	.....
	32 Ceti.....	40.8	54.5	7.9	21.3	34.8	1 7.86	+ 0.89	.....	+ 59.00	1 2 7.75
Jan. 5	β Aquarii.....	36.2	49.5	2.7	16.2	29.6	22 2.84	+ 0.86	+ 60.10	+ 60.08	21 23 3.78
	ζ Pegasi.....	57.7	11.0	24.4	37.8	51.2	32 24.42	+ 0.75	60.00	+ 60.14	22 33 25.31
	Vesta.....	27.5	41.8	56.3	10.7	24.9	22 56.24	+ 0.68	.....	+ 60.58	6 23 57.50
	25 Geminorum.....	42.6	57.6	12.7	27.7	42.8	30 12.68	+ 0.63	.....	+ 60.59	6 31 13.90
	28 Geminorum.....	3.0	18.3	33.5	48.7	3.8	33 33.46	+ 0.63	.....	+ 60.59	6 34 34.68
	α Canis Majoris.....	35.4	49.0	3.3	16.8	30.9	37 3.08	+ 0.93	60.68	+ 60.59	6 38 4.60
	36 Geminorum.....	25.5	39.7	53.8	8.2	22.7	40 53.98	+ 0.68	.....	+ 60.59	6 41 55.25
INSTRUMENT REVERSED.											
Jan. 7	64 Piscium.....	0.0	13.7	27.5	41.5	55.4	39 27.62	+ 0.64	.....	+ 63.00	0 40 31.26
	ϕ^2 Ceti.....	32.7	46.3	59.8	13.5	26.8	40 59.82	+ 0.82	.....	+ 63.00	0 42 3.64
	66 Piscium.....	32.4	46.5	0.5	14.5	28.4	45 0.46	+ 0.62	.....	+ 63.01	0 46 4.09
	ϕ^3 Ceti.....	26.0	39.7	53.3	6.8	20.4	46 53.24	+ 0.61	.....	+ 63.01	0 47 56.86
	25 Ceti.....	23.5	36.8	50.4	3.7	17.0	53 50.28	+ 0.79	.....	+ 63.01	0 54 54.08
	28 Ceti.....	29.7	43.2	56.7	10.2	23.7	56 56.70	+ 0.82	.....	+ 63.02	0 58 0.54
	η Ceti.....	58.6	12.2	25.7	39.3	52.9	59 25.74	+ 0.83	.....	+ 63.02	1 0 29.59
	α Ursæ Minoris.....	.....	36.0	.....	4.0	16.0	0 49.47	- 17.69	.....	+ 63.02	1 1 34.80
	τ Piscium.....	14.4	29.6	44.8	0.1	15.3	1 44.84	+ 0.52	.....	+ 63.02	1 2 48.38
	71 Ceti.....	20.5	33.8	47.2	0.4	13.7	15 47.12	+ 0.77	.....	+ 63.09	2 16 50.98
	γ Ceti.....	28.1	41.4	51.6	7.8	21.2	33 54.62	+ 0.74	+ 63.09	+ 63.11	2 34 58.47
	A. S. C. 299.....	10.7	34.0	57.2	20.6	43.9	37 57.28	+ 0.11	.....	+ 63.11	2 39 0.50
	α Ceti.....	22.3	35.5	49.0	2.4	15.7	52 48.98	+ 0.73	63.18	+ 63.12	2 53 52.83
	95 Ceti.....	38.8	52.2	5.3	18.7	31.8	9 5.36	+ 0.76	.....	+ 63.14	3 10 9.26
	π^2 Ceti.....	12.2	25.5	38.7	51.9	5.4	11 38.74	+ 0.73	.....	+ 63.14	3 12 42.61
	Groombridge 642.....	12.5	29.0	45.0	1.5	18.0	13 45.20	- 6.50	.....	+ 63.14	3 14 41.81

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Jan. 7	ϵ Eridani.....	51.0	4.3	17.8	31.4	44.8	24	17.86	+ 0.82	.....	+63.15	h. m. s. 3 25 21.83
	20 Eridani	26.4	40.5	54.6	8.5	22.7	27	54.54	+ 0.86	.....	+63.16	3 28 58.56
	21 Eridani	34.6	48.2	1.5	14.9	28.3	30	1.50	+ 0.79	.....	+63.16	3 31 5.45
	22 Eridani	10.7	24.0	37.4	50.7	4.1	31	37.38	+ 0.79	.....	+63.16	3 32 41.33
	δ Eridani	2.4	15.8	29.4	43.0	56.3	34	29.38	+ 0.82	.....	+63.16	3 35 33.36
	* Pleiad. D. + 23° 14'	13.6	28.3	42.8	57.3	11.7	36	42.74	+ 0.58	.....	+63.17	3 37 46.49
	26 Tauri (Pleiad.)	51.9	6.3	20.7	35.3	49.7	38	20.78	+ 0.58	.....	+63.17	3 39 24.53
	31 Tauri.....	55.8	9.2	22.5	35.8	49.3	42	22.52	+ 0.71	.....	+63.17	3 43 26.40
	32 Eridani.....	42.9	56.4	9.7	23.0	36.3	45	9.66	+ 0.77	.....	+63.18	3 46 13.61
	γ^1 Eridani.....	0.8	14.7	28.3	42.0	55.5	49	28.26	+ 0.83	+63.21	+63.18	3 50 32.27
	35 Eridani.....	53.3	6.6	19.7	33.2	46.5	52	19.86	+ 0.77	.....	+63.19	3 53 23.82
	37 Eridani.....	1.7	15.2	28.4	42.1	55.5	1	28.58	+ 0.80	.....	+63.19	4 2 32.57
	66 Tauri.....	35.6	49.4	2.7	16.2	29.7	14	2.72	+ 0.69	.....	+63.20	4 15 6.61
	44 Eridani.....	43.7	57.0	10.2	23.5	36.8	19	10.24	+ 0.74	.....	+63.21	4 20 14.19
	α Tauri.....	11.2	24.9	38.4	52.4	6.3	25	38.64	+ 0.64	63.20	+63.22	4 26 42.50
	49 Eridani.....	26.7	40.0	53.4	6.6	19.8	27	53.30	+ 0.74	.....	+63.22	4 28 57.26
	μ Eridani.....	57.7	11.0	24.4	37.7	51.0	36	24.36	+ 0.77	.....	+63.23	4 37 28.36
	58 Eridani.....	52.2	5.8	19.8	33.8	47.8	39	19.88	+ 0.87	.....	+63.23	4 40 23.98
	π^2 Orionis.....	32.4	46.0	59.6	13.2	26.6	44	59.56	+ 0.68	.....	+63.23	4 46 3.47
	10 Orionis.....	43.0	56.4	9.7	23.0	36.2	49	9.66	+ 0.74	.....	+63.24	4 50 13.64
	η Aurigæ.....	36.8	54.4	12.0	29.5	47.2	54	11.98	+ 0.37	.....	+63.24	4 55 15.59
	β Eridani.....	26.7	40.0	53.7	6.5	20.2	58	53.42	+ 0.79	.....	+63.25	4 59 57.46
	α Aurigæ.....	8.6	27.6	46.5	5.4	24.6	3	46.54	+ 0.30	63.23	+63.25	5 4 50.09
	* D. + 27° 41'	23.3	38.3	53.1	8.0	23.2	30	53.18	+ 0.54	.....	+63.28	5 31 57.00
	* D. + 27° 39'	41.7	56.6	11.8	26.8	41.7	33	11.72	+ 0.54	.....	+63.28	5 34 15.54
	Vesta.....	13.8	28.3	42.7	57.2	11.5	20	42.70	+ 0.58	.....	+63.32	6 21 46.60
	δ Ursæ Min. S. P.	12.0	55.0	38.0	22.0	6.0	22	38.60	+ 9.25	.....	+63.32	6 23 51.17
	\downarrow Virginis.....	27.8	41.3	54.8	8.3	21.7	44	54.78	+ 0.84	.....	+63.68	12 45 59.30
	α Ursæ Min. S. P. ....	.....	58.0	.....	23.0	.....	0	10.65	+20.21	.....	+63.69	13 1 34.55
	θ Virginis.....	6.2	19.5	32.7	45.9	59.4	0	32.74	+ 0.81	.....	+63.69	13 1 37.24
	Jupiter 1 Limb.....	49.7	.....	16.4	.....	43.1	6	16.40	+ 0.82	.....	+63.70	13 7 20.92
	Jupiter 2 Limb.....	.....	5.6	.....	32.3	.....	6	18.95	+ 0.82	.....	+63.70	13 7 23.47
	(a) Moon 1 Limb.....	51.7	5.3	19.2	32.9	46.7	14	19.16	+ 0.87	.....	+63.70	13 15 23.73
	Moon 2 Limb.....	55.4	9.5	23.3	37.0	50.7	16	23.18	+ 0.87	.....	+63.70	13 17 27.75
	82 Virginis.....	38.6	52.1	5.5	18.7	32.3	32	5.44	+ 0.83	.....	+63.72	13 33 9.99
	89 Virginis.....	35.4	49.2	3.1	17.1	31.0	40	3.16	+ 0.90	.....	+63.73	13 41 7.79
Jan. 8	Sun 1 Limb.....	36.3	51.0	5.5	19.8	34.0	14	5.32	+ 0.93	.....	+64.03	19 15 10.28
	Sun 2 Limb.....	57.7	12.3	26.6	41.0	55.4	16	26.60	+ 0.93	.....	+64.03	19 17 31.56
	α Aquilæ.....	22.7	36.1	49.5	3.0	16.5	41	49.56	+ 0.72	+64.08	+64.07	19 42 54.35
	α Cygni.....	12.7	31.5	50.3	8.8	27.6	34	50.18	+ 0.34	64.10	+64.11	20 35 54.63
	ζ Cygni.....	28.5	43.7	59.3	14.5	29.6	4	59.12	+ 0.53	64.09	+64.13	21 6 3.78
	ζ Pegasi.....	53.2	6.7	20.3	33.7	47.3	32	20.24	+ 0.71	64.20	+64.24	22 33 25.19
	α Pegasi.....	11.5	25.3	39.0	52.7	6.4	55	38.98	+ 0.68	64.29	+64.26	22 56 43.92
	22 Eridani.....	9.0	22.4	35.8	49.2	2.4	31	35.76	+ 0.82	.....	+64.60	3 32 41.18
	29 Tauri.....	36.3	49.6	2.8	16.3	29.5	36	2.90	+ 0.74	.....	+64.60	3 37 8.24
	Piazzi III. 165.....	51.3	6.1	20.5	34.8	49.3	39	20.40	+ 0.61	.....	+64.61	3 40 25.62
	ϵ Persei.....	25.4	42.6	0.1	17.4	34.6	46	0.02	+ 0.41	.....	+64.61	3 47 5.04
	37 Eridani.....	0.1	13.6	27.0	40.5	53.7	1	26.98	+ 0.84	.....	+64.63	4 2 32.15
	46 Tauri.....	22.0	35.5	48.8	2.4	15.8	3	48.90	+ 0.72	.....	+64.64	4 4 54.26
	39 Eridani.....	12.8	26.1	39.7	53.3	6.7	5	39.72	+ 0.86	.....	+64.64	4 6 45.22
	66 Tauri.....	34.2	47.6	1.2	14.6	28.0	14	1.12	+ 0.72	.....	+64.65	4 15 6.49
	41 Eridani.....	42.3	55.5	8.6	22.1	35.3	19	8.76	+ 0.77	.....	+64.66	4 20 11.19
	49 Eridani.....	25.0	38.4	51.7	5.0	18.4	27	51.70	+ 0.77	.....	+64.67	4 28 57.14
	μ Eridani.....	56.3	9.5	22.8	36.3	49.6	36	22.90	+ 0.80	.....	+64.68	4 37 28.38
	58 Eridani.....	50.5	4.3	18.2	32.2	46.1	39	18.26	+ 0.90	.....	+64.68	4 40 23.84
	π^1 Orionis.....	19.4	32.7	46.2	59.7	13.2	40	46.24	+ 0.72	.....	+64.68	4 41 51.64
	π^2 Orionis.....	30.8	44.1	58.0	11.6	25.1	44	57.98	+ 0.71	.....	+64.69	4 46 3.38

(a) Dark Limb.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Jan. 8	η Aurigæ	35.2	52.7	10.5	28.0	45.6	m_s	s_s	+ 0.39	.....	+ 64.70	h_s m_s s_s
	β Eridani	25.2	38.5	51.8	5.1	18.5	54	51.82	+ 0.82	.....	+ 64.71	4 55 15.49
	* D + 27° 41'	21.7	36.6	51.6	6.6	21.6	30	51.62	+ 0.56	.....	+ 64.75	4 59 57.35
	* D + 27° 39'	40.2	55.3	10.2	25.2	40.1	33	10.20	+ 0.56	.....	+ 64.75	5 31 56.93
	Vesta	8.0	22.4	36.5	51.1	5.4	19	36.68	+ 0.60	.....	+ 64.80	5 34 15.51
	δ Ursæ Min. S. P.	9.5	.....	36.5	19.0	2.5	22	36.02	+ 9.62	.....	+ 64.81	6 20 42.08
	89 Virginis	33.7	47.7	1.5	15.3	29.3	40	1.50	+ 1.00	.....	+ 65.34	6 23 50.45
	(a) Moon 1 Limb	5.0	19.5	33.5	48.0	2.0	59	33.60	+ 1.02	.....	+ 65.36	13 41 7.84
	Moon 2 Limb	12.6	26.8	41.0	55.2	9.4	1	41.00	+ 1.02	.....	+ 65.36	14 0 39.98
	α^2 Libræ	24.4	38.2	52.2	5.8	19.5	40	52.02	+ 0.98	+ 65.44	+ 65.41	14 2 47.38
	δ Ursæ Minoris	28.0	11.0	54.0	37.0	20.5	22	54.10	- 8.74	.....	+ 65.68	14 41 58.41
												18 23 51.04
Jan. 9	Sun 1 Limb	56.6	11.3	25.8	40.2	54.5	18	25.68	+ 1.04	.....	+ 65.75	19 19 32.47
	Sun 2 Limb	18.0	32.3	46.7	1.1	15.5	20	46.72	+ 1.04	.....	+ 65.75	19 21 53.51
	Venus 1 Limb	13.1	27.4	41.8	56.3	10.8	42	41.88	+ 1.04	.....	+ 65.78	19 43 48.70
	α Cygni	11.0	29.7	48.5	7.2	25.8	34	48.44	+ 0.36	65.82	+ 65.84	20 35 54.64
	ζ Cygni	26.8	41.8	57.4	12.5	27.7	4	57.24	+ 0.58	65.92	+ 65.88	21 6 3.70
	ϵ Pegasi	41.8	55.4	9.0	22.6	35.8	35	8.92	+ 0.79	65.93	+ 65.92	21 36 15.63
	ζ Pegasi	51.6	4.9	18.6	32.1	45.5	32	18.54	+ 0.78	65.82	+ 66.00	22 33 25.32
	α Pegasi	9.8	23.3	37.1	50.7	4.5	55	37.08	+ 0.74	66.12	+ 66.03	22 56 43.85
	66 Piscium	29.0	43.1	56.7	10.7	25.0	44	56.90	+ 0.71	.....	+ 66.17	0 46 3.78
	α Ursæ Minoris .....	.....	34.0	.....	1.0	13.0	0	46.77	- 20.55	.....	+ 66.20	1 1 32.42
	τ Piscium	11.0	26.3	41.5	56.7	12.0	1	41.50	+ 0.59	.....	+ 66.20	1 2 48.29
	δ Cassiopeæ	21.1	47.3	13.6	39.7	5.7	14	13.48	- 0.03	.....	+ 66.22	1 15 19.67
	50 Ceti	33.2	47.2	1.0	14.8	28.6	27	0.96	+ 0.99	.....	+ 66.24	1 28 8.19
	α Trianguli	18.1	33.2	48.3	3.5	18.6	42	48.34	+ 0.59	.....	+ 66.26	1 43 55.19
	7 Arietis	17.6	32.0	46.3	0.7	15.1	45	46.34	+ 0.66	.....	+ 66.26	1 46 53.26
	A. S. C. 226	59.8	14.5	29.2	43.8	58.6	56	29.18	+ 0.63	.....	+ 66.27	1 57 36.08
Jan. 10	β Trianguli	20.2	36.3	52.4	8.6	24.5	58	52.40	+ 0.53	.....	+ 66.28	1 59 59.21
	δ Ursæ Minoris	26.0	.....	51.0	.....	.....	22	51.75	- 8.43	.....	+ 67.59	.....
	α Cygni	9.1	27.7	46.8	5.5	24.2	34	46.66	+ 0.36	+ 67.59	+ 67.76	20 35 54.78
	A. S. C. 359	58.2	13.3	28.4	43.5	58.6	9	28.40	+ 0.59	.....	+ 68.29	3 10 37.28
	A. S. C. 371	5.5	31.4	57.3	23.3	49.2	14	57.34	- 0.01	.....	+ 68.30	3 16 5.63
	ψ Persei	16.8	36.6	56.6	16.5	36.2	23	56.54	+ 0.31	.....	+ 68.31	3 25 5.16
	10 Tauri	4.7	18.1	31.4	44.6	57.7	27	31.30	+ 0.84	.....	+ 68.31	3 28 40.45
	46 Tauri	18.0	31.6	44.8	58.5	11.8	3	44.94	+ 0.78	.....	+ 68.35	4 4 54.07
	66 Tauri	30.5	43.7	57.3	10.6	24.2	13	57.26	+ 0.77	.....	+ 68.37	4 15 6.40
	45 Eridani	3.9	17.4	30.6	43.8	57.2	22	30.58	+ 0.84	.....	+ 68.38	4 23 39.80
	α Tauri	5.7	19.5	33.3	47.0	1.0	25	33.30	+ 0.71	68.46	+ 68.38	4 26 42.39
	μ Eridani	52.5	5.8	19.2	32.5	45.8	36	19.16	+ 0.86	.....	+ 68.39	4 37 28.41
	π^1 Orionis	15.6	29.0	42.5	56.1	9.4	40	42.52	+ 0.78	.....	+ 68.40	4 41 51.70
	π^2 Orionis	27.3	40.7	54.3	7.7	21.2	44	54.24	+ 0.76	.....	+ 68.40	4 46 3.40
	α Aurigæ	3.1	22.2	41.2	0.3	19.4	3	41.24	+ 0.33	68.50	+ 68.43	5 4 50.00
	β Orionis	13.3	26.6	40.0	53.4	7.0	5	40.06	+ 0.90	68.52	+ 68.43	5 6 49.39
Jan. 11	β Tauri	29.4	44.5	59.5	14.6	29.7	14	59.51	+ 0.59	68.45	+ 68.44	5 16 8.57
	η Ceti	51.7	5.3	18.9	32.5	46.2	59	18.92	+ 0.95	.....	+ 69.87	1 0 29.74
	α Ursæ Minoris .....	.....	28.0	40.0	53.0	6.0	0	39.90	- 17.57	.....	+ 69.87	1 1 32.20
	δ Cassiopeæ	17.8	44.0	9.6	35.7	2.0	14	9.82	+ 0.12	.....	+ 69.89	1 15 19.83
	50 Ceti	29.6	43.5	57.4	11.3	25.2	26	57.40	+ 0.98	.....	+ 69.90	1 28 8.28
	A. S. C. 179	57.4	10.8	24.5	38.0	51.5	28	21.44	+ 0.95	.....	+ 69.90	1 29 35.29
	ζ Ceti	53.4	7.0	20.5	34.0	47.6	42	20.50	+ 0.95	.....	+ 69.92	1 43 31.37
	α Arietis	27.5	41.8	56.5	10.6	25.2	56	56.32	+ 0.70	+ 69.86	+ 69.94	1 58 6.96
	β Trianguli	16.6	32.7	48.7	4.7	20.8	58	48.70	+ 0.59	.....	+ 69.94	1 59 59.23
	ϵ^3 Eridani	45.6	59.0	12.3	25.6	39.0	55	12.30	+ 0.92	.....	+ 70.00	2 56 23.22
	A. S. C. 359	56.6	11.5	26.7	42.0	57.2	9	26.80	+ 0.65	.....	+ 70.02	3 10 37.17
	A. S. C. 373	6.8	32.3	57.2	22.7	47.8	16	57.36	+ 0.14	.....	+ 70.03	3 18 7.53

(a) Dark Limb.

OBSERVATIONS MADE WITH THE TRANSIT INSTRUMENT IN THE YEAR 1839.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.	
		I.	II.	III.	IV.	V.			observed.	interpol- ated.		
Jan. 11	↓ Persei	15.6	35.4	55.2	14.7	34.6	23 55.10	+ 0.40	.....	+ 70.04	h. m. s.	3 25 5.54
	10 Tauri.....	3.1	16.5	29.8	42.8	56.4	27 29.72	+ 0.87	.....	+ 70.04		3 28 40.63
	Groomb. 2283 S. P....	18.0	8.0	58.5	49.0	38.5	30 58.40	+ 14.21	.....	+ 70.05		3 32 22.66
	δ Eridani	55.3	8.8	22.3	35.6	49.3	34 22.26	+ 0.94	.....	+ 70.06		3 35 33.26
	Piazzi III. 165.....	46.2	0.6	15.2	29.6	44.0	39 15.12	+ 0.69	.....	+ 70.06		3 40 25.87
	γ ¹ Eridani.....	54.0	7.6	21.2	34.8	48.7	49 21.26	+ 0.95	+ 70.06	+ 70.08		3 50 32.29
	35 Eridani.....	46.4	59.5	12.8	26.2	39.4	52 12.86	+ 0.89	.....	+ 70.08		3 53 23.83
	37 Eridani.....	54.6	8.2	21.6	34.9	48.4	1 21.54	+ 0.92	.....	+ 70.09		4 2 32.55
	46 Tauri.....	16.6	30.1	43.4	56.8	10.4	3 43.46	+ 0.82	.....	+ 70.09		4 4 54.37
	39 Eridani.....	7.4	20.8	34.5	47.7	1.4	5 34.36	+ 0.94	.....	+ 70.10		4 6 45.40
	44 Eridani.....	36.6	50.0	3.4	16.6	29.8	19 3.28	+ 0.86	.....	+ 70.12		4 20 14.26
	45 Eridani.....	2.4	15.6	28.8	42.1	55.6	22 28.90	+ 0.87	.....	+ 70.12		4 23 39.89
	A. S. C. 526.....	47.4	1.0	14.4	27.8	41.2	25 14.36	+ 0.92	.....	+ 70.13		4 26 25.41
	49 Eridani.....	19.7	33.0	46.3	59.6	12.8	27 46.28	+ 0.86	.....	+ 70.13		4 28 57.27
	A. S. C. 547.....	54.0	7.5	21.1	34.5	48.0	34 21.02	+ 0.79	.....	+ 70.13		4 35 31.94
	π ¹ Orionis	13.9	27.4	40.8	54.3	7.8	40 40.84	+ 0.81	.....	+ 70.14		4 41 51.79
	6 Orionis	14.6	28.2	41.6	55.3	8.7	44 41.68	+ 0.79	.....	+ 70.14		4 45 52.61
	ω Aurigæ.....	37.4	54.4	11.1	27.8	44.4	47 11.02	+ 0.54	.....	+ 70.15		4 48 21.71
	63 Eridani.....	36.6	50.2	3.8	17.2	30.8	51 3.72	+ 0.94	.....	+ 70.15		4 52 14.81
	η Aurigæ.....	29.8	47.4	5.2	22.5	40.4	54 5.06	+ 0.49	.....	+ 70.15		4 55 15.70
	β Eridani.....	19.8	33.2	46.5	59.8	13.1	58 46.48	+ 0.91	.....	+ 70.16		4 59 57.55
	α Aurigæ.....	1.2	20.4	39.6	58.5	17.5	3 39.44	+ 0.42	70.21	+ 70.16		5 4 50.02
	β Orionis	11.5	25.1	38.4	51.8	5.2	5 38.40	+ 0.92	70.16	+ 70.17		5 6 49.49
	β Tauri.....	27.5	42.5	57.7	12.8	27.8	14 57.66	+ 0.65	70.27	+ 70.17		5 16 8.48
	* D. + 27° 41'.....	15.9	31.3	46.1	1.1	16.0	30 46.08	+ 0.66	.....	+ 70.19		5 31 56.93
	* D. + 27° 39'.....	34.7	50.0	4.7	19.8	34.8	33 4.80	+ 0.66	.....	+ 70.19		5 34 15.65
	Vesta	54.4	8.8	23.1	37.5	52.0	16 23.16	+ 0.70	.....	+ 70.24		6 17 34.10
	δ Ursæ Min. S. P. ....	.....	48.5	32.0	15.5	59.0	22 32.15	+ 9.37	.....	+ 70.24		6 23 51.76
	24 Ursæ Min. S. P....	8.0	19.0	29.5	41.0	51.5	28 29.80	+ 10.43	.....	+ 70.25		6 29 50.48
	δ Ursæ Minoris.....	20.5	4.0	47.0	30.0	.....	22 46.98	- 7.08	.....	+ 70.98		18 23 50.88
Jan. 12	Sun 2 Limb.....	15.2	29.6	43.8	58.2	12.6	33 43.88	+ 0.81	.....	+ 71.06		19 34 55.75
	Venus 1 Limb.....	.....	26.7	40.9	55.6	9.6	58 41.03	+ 0.81	.....	+ 71.08		19 59 52.92
	α Cygni.....	5.6	24.6	43.4	1.9	20.6	34 43.22	+ 0.28	+ 71.11	+ 71.12		20 35 54.62
	ζ Cygni.....	21.6	36.8	52.1	7.4	22.7	4 52.12	+ 0.46	71.15	+ 71.15		21 6 3.73
	ε Pegasi.....	36.8	50.4	3.8	17.3	30.8	35 3.82	+ 0.63	71.18	+ 71.18		21 36 15.63
	64 Piscium.....	51.4	5.3	19.0	32.7	46.5	39 18.98	+ 0.58	.....	+ 71.36		0 40 30.92
	φ ² Ceti.....	24.0	37.6	51.3	4.9	18.5	40 51.26	+ 0.75	.....	+ 71.36		0 42 3.37
	36 Andromedæ.....	40.4	54.8	9.4	23.5	38.2	45 9.26	+ 0.52	.....	+ 71.37		0 46 21.15
	β Andromedæ.....	59.4	15.6	32.0	48.2	4.4	59 31.92	+ 0.41	.....	+ 71.38		1 0 43.71
	α Ursæ Minoris .....	.....	23.0	.....	49.0	2.5	0 35.60	- 16.65	.....	+ 71.38		1 1 30.33
	τ Piscium.....	6.0	21.2	36.4	51.5	6.7	1 36.36	+ 0.47	.....	+ 71.38		1 2 48.21
	50 Ceti.....	28.2	42.1	55.8	9.7	23.6	26 55.88	+ 0.78	.....	+ 71.41		1 28 8.07
	A. S. C. 179.....	56.0	9.5	23.0	36.5	50.0	28 23.00	+ 0.75	.....	+ 71.41		1 29 35.16
	ζ Ceti.....	51.6	5.5	18.9	32.4	46.0	42 18.88	+ 0.75	.....	+ 71.42		1 43 31.05
	ξ ² Eridani.....	10.1	23.6	36.8	50.2	3.6	53 36.86	+ 0.73	.....	+ 71.49		2 54 49.08
	Groombridge 642.....	1.5	17.5	34.5	51.0	9.0	13 34.70	- 6.12	.....	+ 71.51		3 14 40.09
	Groomb. 2283 S. P....	15.5	8.0	59.0	47.0	36.0	30 57.10	+ 13.22	.....	+ 71.53		3 32 21.85
Jan. 13	δ Ursæ Minoris	17.0	0.0	44.0	27.0	.....	22 43.58	- 6.62	.....	+ 73.83		18 23 50.79
	α Lyrae.....	39.4	56.6	13.6	30.6	47.7	30 13.58	+ 0.35	+ 73.71	+ 73.83		18 31 27.76
	β Lyrae.....	21.7	36.7	52.6	8.5	23.5	42 52.60	+ 0.41	73.66	+ 73.85		18 41 6.86
Jan. 14	Sun 1 Limb.....	30.8	45.2	59.5	13.8	28.1	39 59.48	+ 0.75	.....	+ 73.90		19 41 14.13
	Sun 2 Limb.....	51.0	5.3	19.6	34.0	48.2	42 19.62	+ 0.75	.....	+ 73.90		19 43 34.27
	β Ceti.....	47.0	1.2	15.2	29.3	43.4	31 15.22	+ 0.74	74.38	+ 74.19		0 35 30.15
	φ ² Ceti.....	21.5	35.1	48.6	2.2	15.6	40 48.60	+ 0.70	.....	+ 74.20		0 42 3.50
	36 Andromedæ.....	37.7	52.3	6.6	20.8	35.4	45 6.56	+ 0.50	.....	+ 74.20		0 46 21.26

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instrument.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.	m.	s.	s.	observed.	interpolated.	h.	m.	s.
Jan. 14	α Ursæ Minoris	s.	s. 18.5	s. 31.0	s. 43.0	s.	0	30.83	s. -15.57	s.	s. +74.22	h. 1	1	29.48
	46 Ceti.....	59.7	13.6	27.4	41.2	55.0	16	27.38	+ 0.72	.....	+74.23	1	17	42.33
	ϵ^1 Eridani.....	34.2	47.6	1.1	14.4	27.8	52	1.02	+ 0.68	.....	+74.32	2	53	16.02
	ϵ^2 Eridani.....	7.2	20.6	34.1	47.4	0.9	53	34.04	+ 0.68	.....	+74.32	2	54	49.04
	A. S. C. 359.....	52.5	7.7	22.7	37.7	52.8	9	22.68	+ 0.45	.....	+74.34	3	10	37.47
	A. S. C. 371.....	59.6	25.6	51.8	17.9	43.8	14	51.74	- 0.01	.....	+74.34	3	16	6.07
	σ Persei.....	22.0	41.8	1.5	20.9	40.7	18	1.38	+ 0.23	.....	+74.35	3	19	15.96
	22 Eridani.....	59.4	12.8	26.1	39.5	52.8	31	26.12	+ 0.67	.....	+74.36	3	32	41.15
	A. S. C. 407.....	11.5	25.0	38.4	52.0	5.6	34	38.50	+ 0.71	.....	+74.36	3	35	53.57
	η Tauri.....	12.6	27.0	41.5	55.8	10.5	36	41.48	+ 0.49	+74.39	+74.36	3	37	56.33
	γ^1 Eridani.....	49.7	3.4	17.1	30.8	44.6	49	17.12	+ 0.71	74.41	+74.37	3	50	32.20
	39 Eridani.....	3.2	16.8	30.4	43.7	57.3	5	30.28	+ 0.70	.....	+74.39	4	6	45.37
	45 Eridani.....	58.2	11.5	24.7	38.0	51.3	22	24.74	+ 0.64	.....	+74.40	4	23	39.78
	A. S. C. 526.....	43.6	56.8	10.2	23.6	37.0	25	10.24	+ 0.69	.....	+74.41	4	26	25.34
	51 Eridani	49.6	2.8	16.2	29.6	42.8	28	16.20	+ 0.65	.....	+74.41	4	29	31.26
	58 Eridani.....	41.0	54.9	8.8	22.6	36.5	39	8.76	+ 0.74	.....	+74.42	4	40	23.92
	3 Orionis	57.5	10.8	24.3	37.5	50.8	41	24.18	+ 0.61	.....	+74.42	4	42	39.21
	6 Orionis	10.4	24.0	37.5	50.8	4.4	44	37.42	+ 0.57	.....	+74.42	4	45	52.41
	ω Aurigæ.....	33.3	50.1	6.8	23.5	40.4	47	6.82	+ 0.36	.....	+74.43	4	48	21.61
	10 Orionis.....	31.6	45.1	58.5	11.8	25.1	48	58.42	+ 0.63	.....	+74.43	4	50	13.48
	63 Eridani.....	32.5	45.8	59.3	12.9	26.4	50	59.38	+ 0.70	.....	+74.43	4	52	14.51
	14 Orionis.....	26.4	40.0	53.4	6.8	20.3	57	53.38	+ 0.60	.....	+74.44	4	59	8.42
	α Aurigæ.....	57.3	16.2	35.3	54.4	13.4	3	35.32	+ 0.26	74.47	+74.44	5	4	50.02
	β Orionis.....	7.4	20.9	34.2	47.7	1.2	5	34.28	+ 0.69	74.50	+74.44	5	6	49.41
	* D. + 27° 41'.....	12.0	27.2	42.0	57.1	12.1	30	42.08	+ 0.46	.....	+74.47	5	31	57.01
	* D. + 27° 39'.....	30.6	45.7	0.7	15.5	30.6	33	0.62	+ 0.46	.....	+74.47	5	34	15.55
	Vesta.....	51.1	5.5	19.8	34.1	48.6	13	19.82	+ 0.49	.....	+74.50	6	14	34.81
	δ Ursæ Min. S. P.	1.5	45.0	28.5	12.0	54.5	22	28.30	+ 8.14	.....	+74.51	6	23	50.95
	24 Ursæ Min. S. P. .	3.0	14.0	26.0	36.0	47.0	28	25.20	+ 9.06	.....	+74.51	6	29	48.77
Jan. 15	Sun 1 Limb.....	48.1	2.3	16.5	30.8	45.1	44	16.56	+ 0.88	.....	+75.25	19	45	32.69
	Sun 2 Limb.....	8.0	22.2	36.6	50.8	5.1	46	36.54	+ 0.88	.....	+75.25	19	47	52.67
	α Cygni.....	1.5	20.5	39.3	57.8	16.4	34	39.10	+ 0.32	+75.19	+75.30	20	35	54.72
	(a) ζ Cygni.....	17.4	32.6	47.8	3.2	18.5	5	47.90	+ 0.51	15.32	+15.32	21	6	3.73
	α Aquarii.....	47.2	0.6	13.8	27.1	40.4	57	13.82	+ 0.75	15.34	+15.37	21	57	29.94
	ζ Pegasi.....	42.2	55.7	9.2	22.6	36.0	33	9.14	+ 0.67	15.30	+15.41	22	33	25.22
	α Pegasi.....	0.5	14.3	28.0	41.6	55.3	56	27.94	+ 0.64	15.32	+15.43	22	56	44.01
	β Ceti.....	45.6	59.6	13.5	27.6	41.6	35	13.58	+ 0.86	15.89	+15.54	0	35	29.98
	67 Piscium.....	33.5	48.2	3.2	17.8	32.7	47	3.08	+ 0.53	.....	+15.55	0	47	19.16
	α Ursæ Minoris.....	.....	18.0	30.0	42.5	.....	1	30.17	-17.70	.....	+15.56	1	1	28.03
	46 Ceti.....	58.4	12.2	26.0	39.6	53.5	17	25.94	+ 0.82	.....	+15.58	1	17	42.34
	ϵ^2 Eridani.....	5.9	19.2	32.6	46.0	59.4	54	32.62	+ 0.79	.....	+15.67	2	54	49.08
	α^1 Ceti.....	13.1	26.4	39.7	53.0	6.2	10	39.68	+ 0.73	.....	+15.69	3	10	56.10
	A. S. C. 373.....	1.0	26.4	51.6	17.2	42.4	17	51.72	+ 0.02	.....	+15.70	3	18	7.44
	δ Persei.....	35.2	54.5	14.2	33.7	53.2	31	14.16	+ 0.27	.....	+15.72	3	31	30.15
	A. S. C. 407.....	10.4	23.9	37.2	50.5	4.0	35	37.20	+ 0.82	.....	+15.72	3	35	53.74
	Piazzi III. 165.....	40.4	55.0	9.4	23.8	38.4	40	9.40	+ 0.56	.....	+15.73	3	40	25.69
	Groombridge 750.....	46.0	22.0	58.0	34.5	10.0	47	58.10	- 4.99	.....	+15.74	3	48	8.85
	A. S. C. 526.....	42.0	55.3	8.7	22.2	35.5	26	8.74	+ 0.79	.....	+15.78	4	26	25.31
	51 Eridani.....	48.0	1.4	14.5	28.0	41.2	29	14.62	+ 0.75	.....	+15.78	4	29	31.15
	A. S. C. 547.....	48.4	1.8	15.4	28.8	42.3	35	15.34	+ 0.67	.....	+15.79	4	35	31.80
	A. S. C. 552.....	46.5	19.3	52.2	24.6	57.6	37	52.04	- 0.30	.....	+15.79	4	38	7.53
	1 Orionis.....	24.1	37.4	50.7	4.2	17.6	40	50.80	+ 0.69	.....	+15.79	4	41	7.28
	3 Orionis.....	56.1	9.3	22.6	36.0	49.5	43	22.70	+ 0.70	.....	+15.79	4	43	39.19
	6 Orionis.....	8.8	22.5	35.8	49.5	3.2	45	35.96	+ 0.66	.....	+15.80	4	45	52.42
	ω Aurigæ.....	31.7	48.5	5.4	22.0	38.7	48	5.26	+ 0.41	.....	+15.80	4	48	21.47
	10 Orionis.....	30.5	43.7	56.8	10.2	23.5	49	56.94	+ 0.73	.....	+15.80	4	50	13.47
	63 Eridani.....	30.6	44.4	57.9	11.4	21.7	51	57.80	+ 0.81	.....	+15.80	4	52	14.41

(a) Clock put forward one minute.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpol- ated.			
Jan. 15	14 Orionis	25.0	38.4	51.8	5.3	18.6	58	51.82	+ 0.69	.....	+15.81	4 59	8.32	
	Vesta	52.2	6.6	21.2	35.5	49.8	13	21.06	+ 0.57	.....	+15.89	6 13	37.52	
	δ Ursæ Min. S. P.	59.0	43.0	26.5	9.5	52.0	23	26.00	+ 9.24	.....	+15.90	6 23	51.14	
	24 Ursæ Min. S. P.	2.0	13.0	24.0	34.0	45.0	29	23.60	+10.30	.....	+15.90	6 29	49.80	
	δ Ursæ Minoris	15.0	58.5	41.5	24.0	7.0	23	41.20	- 7.51	.....	+16.65	18 23	50.34	
Jan. 16	Sun 1 Limb	4.1	18.5	32.8	47.0	1.2	49	32.72	+ 0.89	.....	+16.74	19 49	50.35	
	Sun 2 Limb	24.0	38.3	52.4	6.7	21.0	51	52.48	+ 0.89	.....	+16.74	19 52	10.11	
	Venus 1 Limb	17.6	31.8	46.1	0.3	14.6	20	46.08	+ 0.89	.....	+16.77	20 21	3.74	
	α Cygni	0.2	18.8	37.4	56.2	14.8	35	37.48	+ 0.33	+16.80	+16.79	20 35	54.60	
	ζ Cygni	15.8	31.2	46.5	1.7	16.9	5	46.42	+ 0.52	16.79	+16.82	21 6	3.76	
	ε Pegasi	31.2	44.7	58.1	11.6	25.0	35	58.12	+ 0.69	16.82	+16.85	21 36	15.66	
	ζ Pegasi	40.5	54.1	7.5	21.0	34.6	33	7.54	+ 0.68	16.89	+16.92	22 33	25.14	
	α Pegasi	58.7	12.5	26.4	39.9	53.7	56	26.24	+ 0.65	17.00	+16.95	22 56	43.84	
	65 Piscium preceding	27.0	.....	56.7	.....	26.6	40	56.77	+ 0.54	.....	+17.08	0 41	14.39	
	65 Piscium following	.....	42.4	.....	12.2	.....	40	57.30	+ 0.54	.....	+17.08	0 41	14.92	
	67 Piscium	31.8	46.6	1.4	16.4	31.1	47	1.46	+ 0.54	.....	+17.09	0 47	19.09	
	28 Ceti	15.5	29.0	42.4	56.0	9.5	57	42.48	+ 0.82	.....	+17.10	0 58	0.40	
	α Ursæ Minoris	2.0	11.0	.....	42.0	.....	1	27.37	-17.69	.....	+17.10	1 1	26.78	
	32 Ceti	22.5	36.1	49.8	3.2	16.6	1	49.64	+ 0.82	.....	+17.10	1 2	7.56	
	46 Ceti	56.6	10.4	24.1	37.8	51.7	17	24.12	+ 0.85	.....	+17.12	1 17	42.09	
	A. S. C. 179	50.1	3.6	17.0	30.5	44.0	29	17.04	+ 0.82	.....	+17.13	1 29	34.99	
	α ¹ Ceti	11.4	24.6	38.0	51.3	4.5	10	37.96	+ 0.74	.....	+17.26	3 10	55.96	
	σ Persei	19.0	38.5	58.2	17.8	37.6	18	58.22	+ 0.28	.....	+17.27	3 19	15.77	
	12 Tauri	44.3	57.5	10.8	24.2	37.6	31	10.88	+ 0.73	.....	+17.29	3 31	28.90	
	A. S. C. 400	25.9	41.5	57.2	12.7	28.4	33	57.14	+ 0.49	.....	+17.29	3 34	14.92	
	π Eridani	47.4	1.2	14.6	28.4	42.0	38	14.72	+ 0.83	.....	+17.29	3 38	32.84	
	Groombridge 750	44.0	20.5	55.0	33.0	8.5	47	56.20	- 4.98	.....	+17.31	3 48	8.53	
	46 Eridani	20.2	33.4	46.7	0.0	13.4	25	46.74	+ 0.80	.....	+17.35	4 26	4.89	
	51 Eridani	46.3	59.6	12.8	26.2	39.5	29	12.88	+ 0.76	.....	+17.36	4 29	31.00	
	A. S. C. 547	46.6	0.2	13.5	27.2	40.7	35	13.64	+ 0.68	.....	+17.37	4 35	31.69	
	A. S. C. 552	45.2	18.0	50.4	23.2	56.0	37	50.56	- 0.20	.....	+17.37	4 38	7.64	
	1 Orionis	22.5	35.8	49.2	2.5	15.8	40	49.16	+ 0.70	.....	+17.37	4 41	7.23	
	3 Orionis	54.4	7.8	21.0	34.4	47.6	42	21.04	+ 0.71	.....	+17.38	4 42	39.13	
	ω Eridani	15.4	28.8	42.1	55.4	8.7	44	42.08	+ 0.79	.....	+17.38	4 45	0.25	
	62 Eridani	44.7	58.2	11.3	24.8	38.2	48	11.44	+ 0.79	.....	+17.38	4 48	29.61	
	64 Eridani	42.6	56.1	9.7	23.4	37.1	52	9.78	+ 0.83	.....	+17.39	4 52	28.00	
	14 Orionis	23.5	36.9	50.2	3.6	17.0	58	50.24	+ 0.70	.....	+17.40	4 59	8.34	
	Vesta	54.2	8.7	23.3	37.7	52.1	12	23.20	+ 0.58	.....	+17.48	6 12	41.26	
	δ Ursæ Min. S. P.	57.0	40.0	23.0	7.0	50.0	23	23.40	+ 9.25	.....	+17.50	6 23	50.15	
	δ Ursæ Minoris	15.0	58.0	41.5	24.5	6.5	23	41.10	- 8.26	.....	+18.39	18 23	51.23	
Jan. 17	Sun 1 Limb	19.7	33.9	48.1	2.4	16.5	53	48.12	+ 1.00	.....	+18.50	19 54	7.62	
	Sun 2 Limb	39.1	53.3	7.5	21.8	36.2	56	7.58	+ 1.00	.....	+18.50	19 56	27.08	
	ζ Cygni	14.3	29.6	44.7	0.0	15.2	5	44.76	+ 0.58	+18.39	+18.59	21 6	3.93	
	ζ Pegasi	38.7	52.4	5.8	19.3	32.7	33	5.78	+ 0.76	18.57	+18.70	22 33	25.24	
	α Pegasi	57.0	10.7	21.5	38.1	51.6	56	24.38	+ 0.73	18.77	+18.73	22 56	43.84	
	β Ceti	42.4	56.4	10.5	21.5	38.1	35	10.41	+ 0.98	18.88	+18.84	0 35	30.26	
	65 Piscium preceding	.....	40.1	.....	10.0	.....	40	55.05	+ 0.60	.....	+18.85	0 41	14.50	
	65 Piscium following	25.6	.....	55.5	.....	25.2	40	55.43	+ 0.60	.....	+18.85	0 41	14.88	
	36 Andromedæ	32.7	47.3	1.6	16.0	30.4	46	1.60	+ 0.65	.....	+18.85	0 46	21.10	
	α Ursæ Minoris	1.0	11.5	.....	39.0	.....	1	26.20	-19.46	.....	+18.87	1 1	25.61	
	32 Ceti	20.8	34.3	47.6	1.1	14.5	1	47.66	+ 0.91	.....	+18.87	1 2	7.44	
	θ ¹ Ceti	11.8	25.2	38.6	52.3	5.7	15	38.72	+ 0.91	19.16	+18.89	1 15	58.52	
	47 Ceti	7.6	21.3	35.1	48.7	2.5	18	35.04	+ 0.94	.....	+18.89	1 18	54.87	
	α Trianguli	5.4	20.3	35.5	50.5	5.7	43	35.48	+ 0.59	.....	+18.93	1 43	55.00	
	A. S. C. 226	46.8	1.6	16.3	31.0	45.5	57	16.21	+ 0.62	.....	+18.95	1 57	35.81	
	63 Ceti	39.1	52.4	6.0	19.4	32.7	3	5.92	+ 0.85	.....	+18.95	2 3	25.72	

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpol- ated.	
Jan. 17	o Ceti	26.8	40.3	53.5	6.7	20.2	10	53.50	+ 0.87	.....	+ 18.96	2 11 13.33
	ζ Persei	11.3	26.8	42.5	58.2	13.6	43	42.48	+ 0.55	.....	+ 19.07	3 44 2.10
	35 Eridani	36.9	50.3	3.7	16.8	30.2	53	3.58	+ 0.86	.....	+ 19.08	3 53 23.52
	46 Eridani	18.3	31.6	45.1	58.5	12.0	25	45.10	+ 0.90	.....	+ 19.12	4 26 5.12
	ν ² Eridani	31.2	44.4	57.6	11.0	44.4	27	57.72	+ 0.87	.....	+ 19.12	4 28 17.71
	1 Orionis	20.5	34.0	47.4	1.0	14.3	40	47.44	+ 0.78	.....	+ 19.14	4 41 7.36
	5 Orionis	13.6	27.0	40.2	53.6	7.0	44	40.28	+ 0.82	.....	+ 19.14	4 45 0.24
	62 Eridani	42.8	56.2	9.5	23.1	36.4	48	9.60	+ 0.88	.....	+ 19.15	4 48 29.63
	ε Aurigæ	30.7	49.2	7.4	25.6	44.4	50	7.46	+ 0.39	.....	+ 19.15	4 50 27.00
	64 Eridani	40.7	54.5	8.1	21.7	35.4	52	8.08	+ 0.93	.....	+ 19.15	4 52 28.16
	66 Eridani	2.5	15.8	29.2	42.6	55.9	58	29.20	+ 0.88	.....	+ 19.16	4 58 49.24
	δ Ursæ Min. S. P. ....	.....	39.0	21.5	5.0	48.5	23	21.92	+ 10.18	.....	+ 19.26	6 23 51.36
	δ Ursæ Minoris	13.0	56.5	39.5	23.0	.....	23	39.58	- 8.26	.....	+ 20.13	18 23 51.45
Jan. 18	δ Ursæ Minoris	12.0	55.0	.....	.....	.....	23	38.15	- 8.26	.....	+ 21.87	18 23 51.76
	α Aquilæ	4.7	18.2	31.7	45.1	58.5	42	31.64	+ 0.78	+ 22.05	+ 21.96	19 42 54.38
	β Aquilæ	33.4	46.7	0.3	13.7	27.1	47	0.24	+ 0.79	22.08	+ 21.97	19 47 23.00
Jan. 19	Sun 2 Limb	7.5	21.7	36.0	50.2	4.2	4	35.92	+ 1.00	.....	+ 21.99	20 4 58.91
	Venus 1 Limb	53.3	7.5	21.7	35.8	49.8	36	21.62	+ 0.99	.....	+ 22.03	20 36 44.64
	ζ Cygni	10.6	25.7	41.1	56.3	11.6	5	41.06	+ 0.58	22.09	+ 22.06	21 6 3.70
	ε Pegasi	26.0	39.5	52.8	6.3	19.7	35	52.86	+ 0.77	22.01	+ 22.10	21 36 15.73
	α Aquarii	40.2	53.6	7.0	20.3	33.6	57	6.94	+ 0.85	22.11	+ 22.13	21 57 29.92
	α Pegasi	53.6	7.3	20.8	34.6	48.4	56	20.94	+ 0.73	22.20	+ 22.19	22 56 43.86
	φ Aquarii	8.6	21.8	35.3	48.5	1.8	5	35.20	+ 0.90	.....	+ 22.20	23 5 58.30
	Moon 1 Limb	12.4	26.1	39.7	53.4	7.1	29	39.74	+ 0.89	.....	+ 22.23	23 30 2.86
	ω Piscium	12.5	26.1	39.3	52.6	6.1	50	39.32	+ 0.79	.....	+ 22.25	23 51 2.36
	α Andromedæ	11.0	26.1	41.2	56.3	11.2	59	41.16	+ 0.60	22.16	+ 22.26	0 0 4.02
	65 Piscium preceding	21.8	.....	51.6	.....	21.5	40	51.63	+ 0.60	.....	+ 22.31	0 41 14.54
	65 Piscium following .....	.....	37.2	.....	6.8	.....	40	52.00	+ 0.60	.....	+ 22.31	0 41 14.91
	36 Andromedæ	29.2	43.6	58.2	12.4	26.7	45	58.02	+ 0.65	.....	+ 22.31	0 46 20.98
	β Andromedæ	48.5	4.6	20.8	37.0	53.2	0	20.82	+ 0.52	.....	+ 22.33	1 0 43.67
	α Ursæ Minoris	53.0	8.0	.....	34.5	.....	1	20.87	- 19.46	.....	+ 22.33	1 1 23.74
	α Trianguli	1.6	17.0	32.3	47.5	2.7	43	32.22	+ 0.59	.....	+ 22.37	1 43 55.18
	A. S. C. 226	43.7	58.2	13.0	27.6	42.4	57	12.98	+ 0.62	.....	+ 22.39	1 57 35.99
	29 Tauri	18.3	31.6	45.0	58.3	11.6	36	44.96	+ 0.80	.....	+ 22.50	3 37 8.26
	π Eridani	42.4	56.2	9.8	23.3	36.9	38	9.72	+ 0.93	.....	+ 22.50	3 38 33.15
	ζ Persei	8.2	23.6	39.3	54.7	10.5	43	39.26	+ 0.55	.....	+ 22.50	3 41 2.31
	ε Persei	7.5	24.8	41.9	59.3	16.5	46	42.00	+ 0.45	.....	+ 22.51	3 47 4.96
	46 Eridani	14.8	28.3	41.6	55.1	8.4	25	41.64	+ 0.90	.....	+ 22.55	4 26 5.09
	ν ² Eridani	27.6	40.9	54.3	7.5	20.8	27	54.22	+ 0.87	.....	+ 22.55	4 28 17.64
	53 Eridani	58.6	12.4	26.2	39.9	53.6	30	26.14	+ 0.94	.....	+ 22.56	4 30 49.64
	A. S. C. 542	5.6	19.5	33.3	46.8	0.7	31	33.18	+ 0.94	.....	+ 22.56	4 31 56.68
	A. S. C. 552	39.6	12.4	45.4	18.2	50.8	37	45.28	- 0.31	.....	+ 22.56	4 38 7.53
	59 Eridani	28.0	41.7	55.6	9.4	23.3	40	55.60	+ 0.96	.....	+ 22.57	4 41 19.13
	60 Eridani	6.4	20.1	34.0	47.7	1.6	42	33.96	+ 0.96	.....	+ 22.57	4 42 57.49
	ω Eridani	10.2	23.5	36.8	50.2	3.4	44	36.82	+ 0.89	.....	+ 22.57	4 45 0.28
	62 Eridani	39.4	53.1	6.4	19.6	32.8	48	6.26	+ 0.88	.....	+ 22.58	4 48 29.72
	ζ Aurigæ	17.4	34.6	52.4	10.0	27.5	50	52.38	+ 0.43	.....	+ 22.58	4 51 15.39
	↓ Eridani	49.1	2.4	15.6	29.1	42.4	53	15.72	+ 0.90	.....	+ 22.58	4 53 39.20
	66 Eridani	59.2	12.5	25.8	39.2	52.5	58	25.84	+ 0.88	.....	+ 22.59	4 58 49.31
	Vesta	9.3	23.6	38.1	52.5	7.1	9	38.12	+ 0.64	.....	+ 22.67	6 10 1.43
	δ Ursæ Min. S. P.	53.0	35.5	19.5	2.0	45.5	23	19.10	+ 10.18	.....	+ 22.68	6 23 51.96
Jan. 20	ω Piscium	48.5	1.8	15.2	28.5	41.8	31	15.16	+ 0.77	+ 23.83	+ 23.82	23 31 39.75
	α Piscium	11.2	24.3	37.6	51.0	4.5	50	37.72	+ 0.76	.....	+ 23.84	23 51 2.32
	α Andromedæ	9.4	24.4	39.5	54.6	9.5	59	39.48	+ 0.58	23.85	+ 23.85	0 0 3.91
	γ Pegasi	4.5	18.4	32.0	45.7	59.4	4	32.00	+ 0.70	23.91	+ 23.85	0 4 56.55

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Jan. 20	Moon 1 Limb	8.1	21.7	35.4	49.0	2.5	21	35.34	+ 0.81	.....	+23.87	h. m. s. 0 22 0.02
	β Ceti.....	37.5	51.5	5.6	19.6	33.5	35	5.54	+ 0.92	+23.81	+23.89	0 35 30.35
	δ Piscium.....	28.5	41.7	55.1	8.6	22.0	39	55.18	+ 0.75	.....	+23.89	0 40 19.82
	ϵ Piscium.....	43.9	57.3	10.5	24.0	37.4	54	10.62	+ 0.75	.....	+23.91	0 54 35.28
	α Ursæ Minoris	51.5	5.0	17.5	31.0	46.0	1	18.20	-18.02	.....	+23.92	.....
(a) Jan. 21	Sun 1 Limb.....	14.2	28.4	42.6	56.8	11.1	10	42.62	+ 0.93	.....	+25.24	20 11 8.79
	α Cygni.....	51.5	10.5	28.8	47.8	6.5	35	29.02	+ 0.38	+25.22	+25.27	20 35 54.67
	ζ Cygni.....	7.4	22.7	38.0	53.2	8.4	5	37.94	+ 0.57	25.22	+25.30	21 6 3.81
	ϵ Pegasi.....	22.5	36.0	49.6	3.2	16.6	35	49.58	+ 0.74	25.32	+25.34	21 36 15.66
	α Aquarii.....	37.2	50.4	3.7	16.8	30.3	57	3.68	+ 0.81	25.41	+25.36	21 57 29.85
	α Pegasi.....	50.1	3.8	17.7	31.4	45.2	56	17.64	+ 0.70	25.52	+25.44	22 56 43.78
	ϵ Piscium.....	42.4	55.5	9.2	22.6	35.8	54	9.10	+ 0.75	.....	+25.58	0 54 35.43
	α Ursæ Minoris	58.0	3.0	15.5	29.0	.....	1	15.83	-17.64	.....	+25.59	1 1 23.78
	Moon 1 Limb	32.5	46.4	0.3	14.1	28.0	14	0.26	+ 0.76	.....	+25.61	1 14 26.63
	ϵ Piscium.....	0.5	14.3	27.6	41.1	54.4	36	27.58	+ 0.75	.....	+25.64	1 36 53.97
	γ Arietis.....	48.2	2.1	16.0	30.1	44.2	44	16.12	+ 0.67	.....	+25.65	1 44 42.44
	12 Tauri.....	35.8	49.2	2.4	15.7	29.0	31	2.42	+ 0.78	.....	+25.78	3 31 28.98
	29 Tauri.....	15.0	28.4	41.7	55.1	8.5	36	41.74	+ 0.76	.....	+25.79	3 37 8.29
	30 Eridani.....	52.3	5.5	18.8	32.2	45.5	44	18.86	+ 0.84	.....	+25.80	3 44 45.50
	ξ Persei.....	33.8	50.3	6.6	22.7	39.2	48	6.52	+ 0.51	.....	+25.80	3 48 32.83
	45 Tauri.....	53.9	7.3	20.6	34.0	47.4	2	20.64	+ 0.77	.....	+25.82	4 2 47.23
	47 Tauri.....	18.6	32.2	45.7	59.1	12.5	4	45.62	+ 0.74	.....	+25.83	4 5 12.19
	40 Eridani.....	59.1	12.5	26.0	39.4	52.8	7	25.96	+ 0.85	.....	+25.83	4 7 52.64
	ξ Eridani.....	47.6	0.9	14.4	27.7	41.0	15	14.32	+ 0.83	.....	+25.84	4 15 40.99
	47 Eridani.....	34.2	47.4	0.7	14.2	27.6	26	0.82	+ 0.85	.....	+25.85	4 26 27.52
	ν^2 Eridani.....	24.3	37.6	51.0	4.3	17.5	27	50.94	+ 0.82	.....	+25.85	4 28 17.61
	53 Eridani.....	55.4	9.2	22.9	36.6	50.3	30	22.88	+ 0.89	.....	+25.86	4 30 49.63
	A. S. C. 542.....	2.5	16.3	29.8	43.7	57.4	31	29.94	+ 0.89	.....	+25.86	4 31 56.69
	59 Eridani.....	24.6	38.4	52.4	6.3	20.2	40	52.38	+ 0.91	.....	+25.87	4 41 19.16
	5 Orionis.....	7.1	20.4	33.6	46.8	0.3	44	33.64	+ 0.78	.....	+25.87	4 45 0.29
	64 Eridani.....	34.3	47.7	1.5	15.0	28.5	52	1.40	+ 0.88	.....	+25.88	4 52 28.16
	66 Eridani.....	56.0	9.4	22.6	36.1	49.3	58	22.68	+ 0.83	.....	+25.89	4 58 49.40
	Vesta	26.8	41.3	55.6	10.2	24.6	7	55.70	+ 0.62	.....	+25.97	6 8 22.29
	δ Ursæ Min. S. P. ....	.....	33.0	.....	0.5	42.0	23	16.50	+ 9.30	.....	+25.99	6 23 51.79
Jan. 22	α Ursæ Minoris	52.0	4.0	.....	.....	.....	1	18.45	-21.57	.....	+27.37	1 1 24.25
	ϵ Piscium.....	59.1	12.6	26.2	39.5	52.8	36	26.04	+ 0.89	.....	+27.41	1 36 54.34
	η Tauri.....	59.1	13.4	27.9	42.4	57.0	37	27.96	+ 0.73	+27.60	+27.56	3 37 56.25
	30 Eridani.....	50.4	3.7	17.1	30.4	43.7	44	17.06	+ 1.01	.....	+27.57	3 44 45.64
	ξ Persei.....	32.3	48.5	5.0	21.2	37.4	48	4.88	+ 0.59	.....	+27.57	3 48 33.04
	47 Tauri.....	17.0	30.5	44.0	57.4	10.7	4	43.92	+ 0.89	.....	+27.59	4 5 12.40
	μ Tauri.....	53.5	7.1	20.3	33.7	47.2	6	20.36	+ 0.89	.....	+27.60	4 6 48.85
	ξ Eridani.....	45.7	59.4	12.5	25.7	39.2	15	12.50	+ 0.99	.....	+27.61	4 15 41.10
	α Tauri.....	46.4	0.1	13.8	27.7	41.6	26	13.92	+ 0.81	27.67	+27.62	4 26 42.35
	53 Eridani.....	53.6	7.4	20.9	34.7	48.6	30	21.04	+ 1.08	.....	+27.63	4 30 49.75
	A. S. C. 542.....	0.6	14.4	28.2	41.8	55.5	31	28.10	+ 1.08	.....	+27.63	4 31 56.81
	59 Eridani.....	22.6	36.6	50.5	4.4	18.4	40	50.50	+ 1.10	.....	+27.64	4 41 19.24
	60 Eridani.....	1.2	15.2	29.1	42.8	56.6	42	28.98	+ 1.10	.....	+27.64	4 42 57.72
	5 Orionis.....	5.4	18.6	31.8	45.2	58.4	44	31.88	+ 0.94	.....	+27.64	4 45 0.46
	10 Camelopardi.....	48.4	15.0	41.7	8.6	35.3	48	41.80	- 0.02	.....	+27.65	4 49 9.43
	ψ Eridani.....	43.7	57.3	10.7	24.1	37.4	53	10.64	+ 1.03	.....	+27.65	4 53 39.32
	α Aurigæ.....	43.8	2.8	21.8	40.9	0.0	4	21.86	+ 0.41	27.73	+27.66	5 4 49.93
	β Orionis.....	54.2	7.4	20.8	34.2	47.5	6	20.82	+ 1.03	27.58	+27.67	5 6 49.52
	δ Tauri.....	10.1	25.1	40.2	55.4	10.4	15	40.24	+ 0.68	27.62	+27.68	5 16 8.60
	Vesta.....	37.8	52.4	6.7	21.2	35.7	7	6.76	+ 0.73	.....	+27.74	6 7 35.23
	δ Ursæ Min. S. P.	48.0	31.0	13.5	57.5	40.0	23	14.00	+11.31	.....	+27.75	6 23 53.06

(a) Wire I. rejected; apparently 10^s erroneous.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instrument.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpolated.	
Jan. 23	Sun 1 Limb.....	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>m.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>h.</i> <i>m.</i> <i>s.</i>
	Sun 2 Limb.....	55.0	9.2	23.5	.....	51.9	21	23.43	+ 0.96	.....	+28.70	20 19 34.77
	α Cygni.....	48.4	6.8	25.6	44.4	13.2	35	25.68	+ 0.40	+28.55	+28.71	20 35 54.79
	α Tauri.....	44.7	58.6	12.4	26.3	39.8	26	12.36	+ 0.71	29.32	+29.25	4 26 42.32
	ϵ Aurigæ.....	20.7	39.2	57.0	15.6	34.2	49	57.34	+ 0.42	.....	+29.29	4 50 27.05
	α Aurigæ.....	42.1	1.4	20.3	39.4	58.5	4	20.34	+ 0.38	29.27	+29.30	5 4 50.02
	β Tauri.....	8.4	23.4	38.6	53.8	8.9	15	38.62	+ 0.60	29.32	+29.32	5 16 8.54
	δ Orionis.....	51.4	4.7	18.2	31.4	44.7	23	18.08	+ 0.83	29.40	+29.33	5 23 48.24
	Vesta.....	50.6	5.2	19.6	34.1	48.6	6	19.62	+ 0.65	.....	+29.38	6 6 49.65
	δ Ursæ Min. S. P.	46.0	29.5	13.0	56.0	39.0	23	12.70	+ 9.50	.....	+29.40	.....
(a) Jan. 24	Sun 1 Limb.....	.....	0.9	15.0	28.8	43.2	23	14.95	+ 1.02	.....	+30.49	20 23 46.46
	Sun 2 Limb.....	4.7	18.6	32.7	47.4	1.5	25	32.98	+ 1.02	.....	+30.49	20 26 4.49
	γ Cassiopeæ.....	37.0	3.5	30.4	56.7	23.2	46	30.16	+ 0.06	.....	+30.83	0 47 1.05
	θ Cassiopeæ.....	3.0	25.8	48.6	11.4	34.1	0	48.58	+ 0.22	.....	+30.84	1 1 19.64
	α Ursæ Minoris.....	40.0	56.5	.....	23.0	37.0	1	9.05	-18.68	.....	+30.84	.....
	ϵ Cassiopeæ.....	23.0	52.2	21.2	50.4	19.5	42	21.26	- 0.06	.....	+30.90	1 42 52.10
	α Arietis.....	6.4	20.7	35.2	49.5	4.1	57	35.18	+ 0.70	+30.84	+30.92	1 58 6.80
	η Tauri.....	55.5	10.2	24.5	38.9	53.4	37	24.50	+ 0.69	31.07	+31.05	3 37 56.24
	ϵ Persei.....	58.8	16.2	33.4	50.6	7.7	46	33.34	+ 0.50	.....	+31.06	3 47 4.90
	γ^1 Eridani.....	32.9	46.5	0.1	13.6	27.4	50	0.10	+ 0.97	31.06	+31.06	3 50 32.13
	37 Tauri.....	11.4	26.0	40.3	54.5	8.8	54	40.20	+ 0.71	.....	+31.07	3 55 11.98
	(a) Moon 1 Limb.....	17.4	32.7	47.9	3.1	17.2	5	47.86	+ 0.70	.....	+31.08	4 6 19.64
	α Tauri.....	42.7	56.6	10.5	24.4	38.2	26	10.48	+ 0.76	31.14	+31.10	4 26 42.34
	τ Tauri.....	35.7	50.4	4.5	19.1	33.4	32	4.62	+ 0.70	.....	+31.11	4 32 36.43
	60 Eridani.....	57.7	11.6	25.6	39.4	53.3	42	25.52	+ 1.00	.....	+31.12	4 42 57.64
	ω Eridani.....	1.6	15.0	28.2	41.6	55.1	44	28.30	+ 0.92	.....	+31.12	4 45 0.34
	ϵ Tauri.....	29.5	43.7	58.1	12.3	26.5	52	58.02	+ 0.71	.....	+31.13	4 53 29.86
	α Aurigæ.....	40.2	59.4	18.4	37.5	56.5	4	18.40	+ 0.41	31.17	+31.14	5 4 49.95
Jan. 25	Sun 1 Limb.....	55.6	9.8	24.1	38.0	52.1	27	23.92	+ 0.89	.....	+32.15	20 27 56.96
	Sun 2 Limb.....	14.0	27.8	41.7	56.0	10.2	29	41.94	+ 0.89	.....	+32.15	20 30 14.98
	α Cygni.....	44.6	3.4	22.2	40.8	59.4	35	22.08	+ 0.40	+32.16	+32.16	20 35 54.64
	ϵ Pegasi.....	15.7	29.3	42.7	56.3	9.7	35	42.74	+ 0.73	32.18	+32.23	21 36 15.70
	α Aquarii.....	30.3	43.6	56.8	10.1	23.3	56	56.82	+ 0.79	32.30	+32.25	21 57 29.86
	γ Aquilæ.....	33.7	47.2	0.6	14.1	27.6	38	0.64	+ 0.78	+33.79	+33.89	19 38 35.31
	α Aquilæ.....	53.1	6.5	19.8	33.4	46.7	42	19.90	+ 0.79	33.88	+33.89	19 42 54.58
Jan. 26	Sun 1 Limb.....	4.2	18.5	32.4	46.6	0.5	31	32.44	+ 0.97	.....	+33.96	20 32 7.37
	Sun 2 Limb.....	22.2	36.3	50.3	4.5	18.4	33	50.34	+ 0.97	.....	+33.96	20 34 25.27
	ζ Cygni.....	58.5	13.8	29.3	44.5	59.7	5	29.16	+ 0.61	33.98	+34.00	21 6 3.77
	Venus 1 Limb.....	32.3	46.6	0.7	14.7	28.6	12	0.58	+ 0.96	.....	+34.00	21 12 35.54
	ϵ Pegasi.....	13.8	27.4	40.7	54.4	7.7	35	40.80	+ 0.79	34.07	+34.03	21 36 15.62
	γ Cassiopeæ.....	33.8	0.2	26.6	53.3	19.6	46	26.70	+ 0.06	.....	+34.28	0 47 1.04
	α Ursæ Minoris.....	35.5	50.0	.....	.....	.....	1	3.15	-17.97	.....	+34.30	.....
	α Aurigæ.....	36.6	55.7	14.8	34.0	53.1	4	14.84	+ 0.40	34.71	+34.66	5 4 49.90
	β Orionis.....	47.1	0.4	14.0	27.3	40.5	6	13.86	+ 0.91	34.53	+34.66	5 6 49.43
	β Tauri.....	2.9	18.2	33.3	48.4	3.4	15	33.24	+ 0.62	34.65	+34.68	5 16 8.54
	26 Aurigæ.....	13.4	28.7	44.3	59.7	15.0	27	44.22	+ 0.60	.....	+34.69	5 28 19.51
	136 Tauri.....	8.7	23.8	38.6	53.7	8.6	42	38.68	+ 0.63	.....	+34.71	5 43 14.02
	Vesta.....	.....	53.6	8.1	.....	.....	4	8.10	+ 0.67	.....	+34.75	6 4 43.52
	Moon 1 Limb.....	6.0	21.4	37.0	52.9	8.4	12	37.14	+ 0.66	.....	+34.76	6 13 12.56
Jan. 27	μ Geminorum.....	8.5	22.7	37.3	51.6	6.0	12	37.22	+ 0.67	+36.92	+36.88	6 13 14.77
	δ Ursæ Min. S. P.	40.0	22.5	6.0	49.0	32.5	23	6.00	+ 9.34	.....	+36.90	.....
	ϵ Geminorum.....	56.4	10.6	25.6	40.5	55.1	33	25.64	+ 0.64	.....	+36.91	6 34 3.19
	α Canis Majoris.....	59.3	13.1	27.0	40.8	54.6	37	26.96	+ 0.95	36.82	+36.92	6 38 4.83
	τ Geminorum.....	46.6	2.1	17.4	33.0	48.3	0	17.48	+ 0.60	.....	+36.95	7 0 55.03

(a) Wire V. rejected, being apparently 1st erroneous.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
Jan. 27	δ Geminorum	25.4	40.0	54.4	8.5	23.1	9 54.28	+ 0.68	+36.99	+36.96	7 10 31.92
	Moon 1 Limb	23.0	38.1	53.8	9.0	24.4	14 53.66	+ 0.65	.....	+36.97	7 15 31.28
	α Geminorum preced.	11.4	.....	43.2	.....	14.5	23 43.03	+ 0.57	} 37.08 {	+36.98	7 24 20.58
	α Geminorum follow. ....	.....	27.5	.....	59.4	.....	23 43.45	+ 0.57		+36.98	7 24 21.00
	α Canis Minoris	49.4	2.7	16.2	29.4	42.6	30 16.06	+ 0.80	36.95	+36.99	7 30 53.85
	κ Geminorum	38.2	52.8	7.5	22.1	36.7	34 7.46	+ 0.65	.....	+37.00	7 34 45.11
	6 Cancri	31.5	46.4	1.6	16.6	31.8	53 1.58	+ 0.62	.....	+37.02	7 53 39.22
Jan. 28	α Ursæ Minoris	33.0	45.5	.....	.....	.....	0 59.70	- 19.39	.....	+38.38	1 1 18.69
	σ Ceti	20.8	34.5	48.4	2.4	16.2	23 48.46	+ 1.03	.....	+38.49	2 24 27.98
	77 Ceti	40.3	53.7	7.3	20.5	34.1	26 7.18	+ 0.97	.....	+38.49	2 26 46.64
	33 Arietis	8.7	23.6	38.4	53.3	8.2	30 38.44	+ 0.68	.....	+38.50	2 31 17.62
	84 Ceti	53.7	7.1	20.4	33.6	47.0	32 20.36	+ 0.92	.....	+38.50	2 32 59.78
	A. S. C. 299	34.6	58.0	21.4	44.7	8.0	38 21.34	+ 0.20	.....	+38.51	2 39 0.05
	5 Eridani	28.2	41.5	54.9	8.2	21.5	50 54.86	+ 0.93	.....	+38.53	2 51 34.32
	η Eridani	9.4	22.9	36.4	49.7	3.2	52 36.32	+ 0.97	.....	+38.53	2 53 15.82
	ζ Persei	40.5	57.3	14.2	31.2	48.0	54 14.24	+ 0.54	.....	+38.53	2 54 53.31
	45 Tauri	41.0	54.5	7.6	21.0	34.5	2 7.72	+ 0.87	.....	+38.62	4 2 47.21
	40 Eridani	46.3	59.9	13.3	26.5	40.2	7 13.24	+ 0.97	.....	+38.63	4 7 52.84
	ξ Eridani	34.8	48.3	1.5	14.7	28.2	15 1.50	+ 0.94	.....	+38.64	4 15 41.08
	α Tauri	35.3	49.2	3.2	16.8	30.6	26 3.02	+ 0.78	+38.54	+38.65	4 26 42.45
	8 Orionis	47.2	0.4	13.6	27.0	40.2	45 13.68	+ 0.89	.....	+38.68	4 45 53.25
	10 Camelopardi	36.8	4.0	30.4	57.2	24.2	48 30.52	+ 0.04	.....	+38.68	4 49 9.24
	ψ Eridani	32.7	46.3	59.6	13.0	26.5	52 59.62	+ 0.97	.....	+38.69	4 53 39.28
	α Aurigæ	32.6	51.6	10.8	29.8	49.0	4 10.76	+ 0.42	38.75	+38.71	5 4 49.89
	β Orionis	42.6	56.2	9.7	23.2	36.6	6 9.66	+ 0.97	38.75	+38.71	5 6 49.34
	β Tauri	58.8	13.9	29.1	44.2	59.2	15 29.04	+ 0.66	38.80	+38.72	5 16 8.42
	α Orionis	22.4	35.8	49.2	2.6	16.2	45 49.24	+ 0.85	38.70	+38.76	5 46 28.85
	Vesta	19.8	34.4	48.8	3.4	17.8	2 48.84	+ 0.71	.....	+38.78	6 3 28.33
	δ Ursæ Min. S. P.	38.0	20.5	4.0	48.0	31.0	23 4.30	+ 10.25	.....	+38.81	6 23 53.36
	κ Geminorum	36.3	50.9	5.6	20.2	34.8	34 5.56	+ 0.70	.....	+38.90	7 34 45.16
	6 Cancri	29.5	44.6	59.6	14.7	29.7	52 59.62	+ 0.66	.....	+38.92	7 53 39.20
	Moon 1 Limb	12.4	27.6	42.4	57.3	12.2	13 42.38	+ 0.73	.....	+38.95	8 14 22.06
	δ Cancri	25.8	39.7	53.7	7.6	21.8	34 53.72	+ 0.76	.....	+38.97	8 35 33.45
	ξ Cancri	58.9	13.4	27.7	42.2	56.6	59 27.76	+ 0.72	.....	+39.01	9 0 7.49
Jan. 29	α Arietis	56.7	11.2	25.6	40.2	54.5	57 25.64	+ 0.72	+40.29	+40.30	1 58 6.66
	α Aurigæ	30.5	49.6	8.7	28.0	47.2	4 8.80	+ 0.42	40.70	+40.54	5 4 49.76
	β Orionis	41.2	54.6	8.0	21.3	34.7	6 7.96	+ 0.97	40.44	+40.54	5 6 49.47
	β Tauri	57.1	12.2	27.4	42.4	57.4	15 27.30	+ 0.66	40.53	+40.55	5 16 8.51
	δ Orionis	40.3	53.6	6.8	19.9	33.4	23 6.80	+ 0.91	40.55	+40.56	5 23 48.27
	Vesta	43.2	57.4	12.4	26.7	41.2	2 12.18	+ 0.71	.....	+40.61	6 2 53.50
	δ Ursæ Min. S. P.	35.5	18.5	1.0	45.0	28.5	23 1.70	+ 10.25	.....	+40.64	.....
	ξ Cancri	57.2	11.4	25.7	40.3	54.7	59 25.86	+ 0.72	.....	+40.84	9 0 7.42
	Moon 2 Limb	56.4	10.7	25.4	39.8	54.0	10 25.26	+ 0.78	.....	+40.85	9 11 6.89
	λ Leonis	22.5	37.2	51.5	6.1	20.5	21 51.56	+ 0.71	.....	+40.86	9 22 33.13
	σ Leonis	26.4	39.6	53.2	6.7	20.0	31 53.18	+ 0.85	.....	+40.88	9 32 34.91
Jan. 30	Sun 1 Limb .....	.....	.....	56.4	10.7	24.6	47 56.60	+ 1.27	.....	+41.73	20 48 39.60
	Sun 2 Limb	45.4	59.5	13.4	27.5	41.4	50 13.44	+ 1.27	.....	+41.73	20 50 56.44
	α Tauri	31.5	45.2	59.0	12.8	26.6	25 59.02	+ 0.93	+42.37	+42.31	4 26 42.26
	Vesta	8.2	22.6	37.3	51.8	6.3	1 37.24	+ 0.84	.....	+42.43	6 2 20.51
	μ Geminorum	2.7	17.3	31.6	46.0	0.3	12 31.58	+ 0.85	42.37	+42.44	6 13 14.87
	δ Ursæ Min. S. P.	32.5	15.5	56.0	40.5	23.5	22 57.60	+ 12.79	.....	+42.45	.....
	α Geminorum preced. ....	.....	21.7	.....	53.1	.....	23 37.40	+ 0.71	} 42.59 {	+42.53	7 24 20.64
	α Geminorum follow.	6.4	.....	37.7	.....	9.3	23 37.80	+ 0.71		+42.53	7 24 21.04
	α Canis Minoris	43.6	57.0	10.4	23.7	37.0	30 10.34	+ 1.04	42.45	+42.55	7 30 53.93
	β Geminorum	16.0	31.1	46.0	1.1	16.1	34 46.06	+ 0.78	42.42	+42.55	7 35 29.39

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpol- ated.	
Jan. 30	λ Leonis	20.7	35.3	49.7	4.2	18.8	21	49.74	+ 0.84	.....	+ 42.72	9 22 33.30
	ϕ Leonis	24.2	37.6	51.1	4.6	18.2	31	51.14	+ 0.99	.....	+ 42.73	9 32 34.86
	ϵ Leonis	31.2	45.7	0.3	14.8	29.5	36	0.30	+ 0.83	+ 42.87	+ 42.74	9 36 43.87
	Moon 2 Limb	7.2	21.3	35.6	49.5	3.6	0	35.44	+ 0.98	.....	+ 42.78	10 1 19.20
	η Leonis	10.4	24.0	37.4	51.1	4.5	23	37.48	+ 1.00	.....	+ 42.81	10 24 21.29
	53 Leonis.....	38.0	51.6	5.1	18.6	32.1	40	5.08	+ 0.98	.....	+ 42.84	10 40 48.90
Jan. 31	Sun 1 Limb	32.6	46.7	0.7	14.8	28.7	52	0.70	+ 1.13	.....	+ 43.78	20 52 45.61
	Sun 2 Limb.....	49.4	3.4	17.3	31.4	45.2	54	17.34	+ 1.13	.....	+ 43.78	20 55 2.25
	θ Cassiopeæ	49.6	12.3	35.0	57.7	20.5	0	35.02	+ 0.21	.....	+ 44.16	1 1 19.39
	α Ursæ Minoris.....	26.0	40.0	.....	6.0	.....	0	52.97	- 21.55	.....	+ 44.16	.....
	θ^1 Ceti.....	46.6	0.0	13.4	26.7	40.3	15	13.40	+ 1.06	+ 44.16	+ 44.19	1 15 58.65
	47 Ceti.....	42.5	56.1	9.7	23.4	37.0	18	9.74	+ 1.09	.....	+ 44.19	1 18 55.02
	ϵ Cassiopeæ	9.5	38.7	7.8	37.0	6.3	42	7.86	- 0.12	.....	+ 44.23	1 42 51.97
	α Arietis.....	52.6	7.2	21.5	35.9	50.3	57	21.50	+ 0.76	44.36	+ 44.25	1 58 6.51
	ϕ Ceti.....	1.3	14.5	28.0	41.2	54.5	10	27.90	+ 1.01	.....	+ 44.27	2 11 13.18
	70 Ceti.....	48.9	2.3	15.4	28.7	42.0	13	15.46	+ 1.00	.....	+ 44.28	2 14 0.74
	71 Ceti.....	38.5	52.3	5.4	18.6	32.1	16	5.38	+ 1.01	.....	+ 44.28	2 16 50.67
	σ Ceti.....	14.7	28.5	42.4	56.3	10.1	23	42.40	+ 1.12	.....	+ 44.29	2 24 27.81
	ϵ Ceti.....	34.5	48.2	1.7	15.4	29.0	31	1.76	+ 1.12	.....	+ 44.30	2 31 47.18
	α Aurigæ.....	26.7	45.9	4.9	24.2	43.5	4	5.04	+ 0.43	44.43	+ 44.54	5 4 50.01
	β Tauri.....	53.0	8.1	23.2	38.4	53.4	15	23.22	+ 0.69	44.57	+ 44.56	5 16 8.47
	δ Orionis.....	36.3	49.5	2.6	15.8	29.2	23	2.68	+ 0.98	44.59	+ 44.57	5 23 48.23
	δ Ursæ Minoris.....	49.5	33.0	16.0	59.5	42.5	23	16.10	- 8.83	.....	+ 45.77	18 23 53.04
Feb. 1	Sun 1 Limb.....	35.8	49.7	3.6	17.4	31.4	56	3.58	+ 1.07	.....	+ 46.01	20 56 50.66
	Sun 2 Limb.....	52.2	6.2	20.0	33.8	47.7	58	19.98	+ 1.07	.....	+ 46.01	20 59 7.06
	ζ Cygni.....	46.7	1.8	17.2	32.4	47.6	5	17.14	+ 0.65	+ 45.99	+ 46.03	21 6 3.82
	α Pegasi.....	29.4	43.2	56.9	10.7	24.4	55	56.92	+ 0.81	46.09	+ 46.19	22 56 43.92
	α Ursæ Minoris	23.0	36.5	49.0	2.0	.....	0	49.42	- 20.84	.....	+ 46.39	1 1 14.97
	ϵ Cassiopeæ.....	7.5	36.5	5.6	34.7	3.8	42	5.62	- 0.13	.....	+ 46.45	1 42 51.94
	α Arietis.....	50.6	5.2	19.5	33.8	48.2	57	19.46	+ 0.72	46.43	+ 46.47	1 58 6.65
	63 Ceti.....	11.7	25.0	38.3	51.7	4.9	2	38.32	+ 0.96	.....	+ 46.48	2 3 25.76
	9 Persei	37.0	0.3	23.5	46.7	10.2	10	23.54	+ 0.17	.....	+ 46.49	2 11 10.20
	47 Tauri.....	57.7	11.1	24.7	37.8	51.4	4	24.54	+ 0.86	.....	+ 46.66	4 5 12.06
	μ Tauri.....	34.0	47.7	1.1	14.6	28.0	6	1.08	+ 0.86	.....	+ 46.67	4 6 48.61
	α Tauri.....	27.2	40.7	54.4	8.6	22.2	25	54.62	+ 0.79	46.89	+ 46.69	4 26 42.10
Feb. 2	Sun 1 Limb.....	37.8	51.9	5.7	19.5	33.6	0	5.70	+ 1.09	.....	+ 48.19	21 0 54.98
	Sun 2 Limb.....	54.2	8.1	21.8	35.8	49.6	2	21.90	+ 1.09	.....	+ 48.19	21 3 11.18
	Venus 1 Limb.....	6.4	20.1	33.8	47.7	1.4	46	33.88	+ 1.07	.....	+ 48.26	21 47 23.21
	ζ Pegasi	9.1	22.6	36.1	49.4	3.0	32	36.04	+ 0.86	+ 48.17	+ 48.33	22 33 25.23
	α Pegasi	27.2	40.9	54.7	8.4	22.2	55	54.68	+ 0.83	48.31	+ 48.36	22 56 43.87
	α Ursæ Minoris .....	.....	.....	.....	0.5	14.0	0	46.80	- 21.20	.....	+ 48.55	.....
	β Orionis.....	32.4	45.7	59.2	12.5	26.0	5	59.16	+ 1.02	49.15	+ 48.92	5 6 49.10
	β Tauri.....	48.6	3.7	18.8	31.0	49.1	15	18.81	+ 0.68	48.91	+ 48.91	5 16 8.46
Feb. 4	α Tauri.....	20.8	34.6	48.5	2.3	16.1	25	48.46	+ 0.68	+ 53.12	+ 53.19	4 26 42.33
	10 Camelopardi.....	22.5	49.4	15.9	42.7	9.5	48	16.00	0.00	.....	+ 53.22	4 49 9.22
	α Aurigæ.....	18.2	37.2	56.1	15.3	34.3	3	56.22	+ 0.35	53.26	+ 53.25	5 4 49.82
	β Orionis.....	28.6	42.0	55.4	8.6	22.2	5	55.36	+ 0.85	53.09	+ 53.25	5 6 49.46
	δ Geminorum.....	9.0	23.1	37.8	52.2	6.6	9	37.80	+ 0.63	53.52	+ 53.43	7 10 31.86
	α Geminorum preced.....	.....	10.8	.....	42.3	.....	23	26.55	+ 0.53	{ 53.57 }	+ 53.45	7 21 20.53
	α Geminorum follow.....	55.6	.....	27.1	.....	58.5	23	27.07	+ 0.53		+ 53.45	7 21 21.05
	α Canis Minoris.....	32.8	46.2	59.6	13.0	26.3	29	59.58	+ 0.76	53.49	+ 53.46	7 30 53.80
Feb. 5	δ Ursæ Minoris.....	41.5	25.0	8.0	51.0	34.0	23	7.90	- 7.62	.....	+ 54.38	18 23 54.66
	Sun 1 Limb.....	40.4	54.0	7.8	21.8	35.7	12	7.94	+ 0.91	.....	+ 54.61	21 13 3.46

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpol- ated.	
Feb. 5	Sun 2 Limb.....	55.5	9.6	23.3	37.3	51.1	14	23.36	+ 0.91	.....	+ 54.61	21 15 18.88
	Venus 1 Limb.....	.....	50.4	4.2	17.8	31.5	1	4.12	+ 0.89	.....	+ 54.68	22 1 59.69
	α Arietis.....	42.4	56.7	11.1	25.5	39.8	57	11.10	+ 0.63	+ 54.82	+ 55.01	1 58 6.74
	9 Persei.....	28.9	52.2	15.4	38.7	1.8	10	15.40	+ 0.15	.....	+ 55.03	2 11 10.58
	69 Ceti.....	19.8	33.2	46.4	59.7	13.0	12	46.42	+ 0.80	.....	+ 55.03	2 13 42.25
	71 Ceti.....	28.4	41.5	54.8	8.3	21.6	15	54.92	+ 0.82	.....	+ 55.04	2 16 50.78
	σ Ceti.....	4.4	18.2	32.0	45.8	59.6	23	32.00	+ 0.91	.....	+ 55.05	2 24 27.96
	ϵ Ceti.....	24.1	37.5	51.1	4.7	18.4	30	51.16	+ 0.88	.....	+ 55.06	2 31 47.10
	γ^1 Eridani.....	52.7	6.4	19.5	33.2	46.5	52	19.66	+ 0.85	.....	+ 55.09	2 53 15.60
	α Aurigæ.....	16.0	35.2	54.3	13.2	32.2	3	54.18	+ 0.35	55.28	+ 55.27	5 4 49.80
	β Orionis.....	26.2	39.7	53.1	6.5	20.0	5	53.10	+ 0.85	55.34	+ 55.28	5 6 49.23
	β Tauri.....	42.2	57.4	12.5	27.6	42.7	15	12.48	+ 0.57	55.37	+ 55.29	5 16 8.34
	δ Orionis.....	25.4	38.7	52.1	5.5	18.6	22	52.06	+ 0.80	55.34	+ 55.30	5 23 48.16
	δ Ursæ Min. S. P.	25.0	6.5	49.5	32.0	16.0	22	49.80	+ 9.46	.....	+ 55.39	6 23 54.65
	Groombridge 1119....	12.0	40.5	3.5	32.0	3.0	43	6.20	- 30.08	.....	+ 55.42	6 43 31.54
Feb. 6	Sun 1 Limb.....	39.2	53.0	7.1	20.8	34.4	16	6.90	+ 0.90	.....	+ 56.69	21 17 4.49
	Sun 2 Limb.....	54.3	8.2	22.1	36.0	49.8	18	22.08	+ 0.90	.....	+ 56.69	21 19 19.67
	α Ursæ Minoris.....	.....	.....	.....	43.0	1.0	0	31.65	- 18.01	.....	+ 57.01	1 1 10.65
	Vesta.....	.....	11.1	25.5	40.3	54.5	58	25.65	+ 0.61	.....	+ 57.45	5 59 23.71
	μ Geminorum.....	47.7	1.8	16.8	31.2	45.5	12	16.60	+ 0.63	+ 57.53	+ 57.47	6 13 14.70
	δ Ursæ Min. S. P.	20.5	3.0	46.5	29.5	12.0	22	46.30	+ 9.46	.....	+ 57.48	6 23 53.24
	α Canis Majoris.....	38.4	52.5	6.6	20.2	34.0	37	6.34	+ 0.91	57.43	+ 57.51	6 38 4.76
	δ Geminorum.....	5.0	19.4	33.8	48.1	2.5	9	33.76	+ 0.63	57.56	+ 57.56	7 10 31.95
	20 Libræ.....	11.6	26.2	40.7	55.4	9.9	53	40.76	+ 0.77	.....	+ 58.26	14 54 39.79
	γ^1 Libræ.....	36.5	50.4	4.4	18.5	32.6	2	4.48	+ 0.74	.....	+ 58.27	15 3 3.49
	β Libræ.....	55.6	8.8	22.2	35.7	49.2	7	22.30	+ 0.69	+ 58.40	+ 58.28	15 8 21.27
	Moon 2 Limb.....	16.4	31.3	46.3	1.1	15.9	18	46.20	+ 0.79	.....	+ 58.30	15 19 45.29
	α Coronæ borealis....	24.1	39.0	53.7	8.8	23.6	26	53.84	+ 0.46	58.43	+ 58.31	15 27 52.61
	α Serpentis.....	55.0	8.1	21.7	35.2	48.6	35	21.78	+ 0.60	58.39	+ 58.33	15 36 20.71
	1 Scorpii.....	50.0	4.8	19.3	34.1	48.6	40	19.36	+ 0.77	.....	+ 58.33	15 41 18.46
	δ Scorpii.....	21.5	36.0	50.2	4.7	18.9	49	50.26	+ 0.76	.....	+ 58.35	15 50 49.37
Feb. 7	Sun 1 Limb.....	37.3	51.2	5.3	19.1	32.8	20	5.14	+ 0.72	.....	+ 58.84	21 21 4.70
	α Aurigæ.....	12.1	31.1	50.1	9.2	28.4	3	50.18	+ 0.27	59.33	+ 59.46	5 4 49.91
	β Tauri.....	38.2	53.3	8.5	23.5	38.6	15	8.42	+ 0.46	59.52	+ 59.48	5 16 8.36
	δ Ursæ Min. S. P.	21.0	4.0	.....	29.5	12.0	22	46.68	+ 7.96	.....	+ 59.57	.....
Feb. 8	α Arietis.....	36.2	50.5	4.8	19.2	33.6	57	4.86	+ 0.52	+ 61.13	+ 61.13	.....
	33 Arietis.....	46.4	1.2	16.0	30.6	45.7	30	15.98	+ 0.18	.....	+ 61.17	2 31 17.63
Feb. 9	INSTRUMENT REVERSED.											
	δ Ursæ Minoris.....	27.0	10.0	53.5	36.5	.....	22	53.25	- 2.39	.....	+ 63.91	.....
	α Lyræ.....	49.6	6.6	23.6	40.6	57.6	30	23.60	+ 0.69	+ 63.93	+ 63.92	18 31 28.21
	β Lyræ.....	30.7	46.6	2.6	18.5	34.4	43	2.56	+ 0.72	63.93	+ 63.94	18 44 7.22
Feb. 11	β Orionis.....	14.8	28.4	41.6	55.1	8.5	5	41.68	+ 0.86	+ 66.68	+ 66.64	5 6 49.18
	β Tauri.....	31.0	46.2	1.2	16.3	31.4	15	1.22	+ 0.61	66.52	+ 66.65	5 16 8.48
	δ Orionis.....	14.1	27.1	40.7	53.9	7.2	22	40.66	+ 0.80	66.68	+ 66.66	5 23 48.12
	ϵ Orionis.....	29.8	43.0	56.4	9.7	22.9	26	56.36	+ 0.81	66.74	+ 66.67	5 28 3.84
	Vesta.....	39.9	54.5	.....	.....	38.4	57	9.12	+ 0.64	.....	+ 66.71	5 58 16.47
	μ Geminorum.....	38.5	53.0	7.4	21.6	36.3	12	7.36	+ 0.65	66.71	+ 66.73	6 13 14.74
Feb. 12	δ Ursæ Min. S. P.	17.0	1.0	43.0	26.0	9.0	22	43.20	+ 5.22	.....	+ 66.75	.....
	Sun 1 Limb.....	18.5	32.1	46.0	59.5	13.3	39	45.88	+ 0.84	.....	+ 68.03	21 40 54.75
	Sun 2 Limb.....	32.2	46.2	59.8	13.6	27.4	41	59.84	+ 0.84	.....	+ 68.03	21 43 8.71

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
Feb. 12	α Andromedæ	24.7	39.7	54.7	9.8	25.0	58 54.78	+ 0.59	+68.33	+68.23	0 0 3.60
	γ Pegasi	20.0	33.7	47.4	1.2	14.8	3 47.42	+ 0.67	68.34	+68.23	0 4 56.32
	α Ursæ Minoris .....	.....	.....	.....	20.0	33.0	0 6.35	- 7.89	.....	+68.32	1 1 6.78
	α Ceti	16.7	30.0	43.4	56.6	10.1	52 43.36	+ 0.73	68.37	+68.47	2 53 52.56
	12 Tauri	53.1	6.4	19.6	33.0	46.5	30 19.72	+ 0.73	.....	+68.52	3 31 28.97
	π Eridani	56.2	9.7	23.4	37.2	50.7	37 23.44	+ 0.83	.....	+68.53	3 38 32.80
	47 Eridani	51.2	4.5	18.0	31.5	44.8	25 18.00	+ 0.80	.....	+68.59	4 26 27.39
	8 Orionis	17.3	30.5	43.8	57.0	10.4	44 43.80	+ 0.73	.....	+68.62	4 45 53.15
	ϵ Aurigæ	41.4	59.6	17.8	36.2	54.5	49 17.90	+ 0.47	.....	+68.63	4 50 27.00
	α Aurigæ	2.6	21.7	40.7	59.7	18.8	3 40.70	+ 0.45	68.54	+68.64	5 4 49.79
	β Orionis	12.7	26.3	39.7	53.2	6.7	5 39.72	+ 0.80	68.68	+68.65	5 6 49.17
	Vesta	30.6	45.1	59.7	14.2	28.8	56 59.68	+ 0.61	.....	+68.72	5 58 9.01
	δ Ursæ Min. S. P. ....	.....	59.0	40.0	25.0	8.5	22 41.62	+ 4.50	.....	+68.75	6 23 54.87
	Groombridge 1119....	35.0	4.0	32.0	0.0	28.0	42 31.80	-13.33	.....	+68.77	6 43 27.24
	δ Ursæ Minoris	22.5	6.0	.....	33.0	15.5	22 49.30	- 3.18	.....	+69.68	18 23 55.80
Feb. 13	Sun 1 Limb	12.5	26.3	39.8	53.4	7.1	43 39.82	+ 0.86	.....	+69.94	21 44 50.62
	Sun 2 Limb	26.0	39.7	53.6	7.1	20.7	45 53.42	+ 0.86	.....	+69.94	21 47 4.22
	Venus 1 Limb .....	.....	42.5	56.3	9.8	23.3	38 56.21	+ 0.83	.....	+70.01	22 40 7.05
	α Andromedæ	22.8	37.8	52.8	8.0	23.2	58 52.92	+ 0.61	+70.16	+70.12	0 0 3.65
	γ Pegasi	18.3	32.0	45.6	59.3	13.1	3 45.66	+ 0.69	70.07	+70.12	0 4 56.47
	α Ursæ Minoris	37.5	50.0	4.5	17.0	31.5	0 4.10	- 7.87	.....	+70.19	1 1 6.42
	α Lyrae	42.5	59.5	16.4	33.5	50.5	30 16.48	+ 0.55	+71.30	+71.34	18 31 28.37
	β Lyrae	23.6	39.5	55.4	11.3	27.2	42 55.40	+ 0.58	71.33	+71.35	18 44 7.33
Feb. 14	Sun 2 Limb	19.1	32.7	46.4	0.1	13.7	49 46.40	+ 0.85	.....	+71.56	21 50 58.81
	α Andromedæ	21.1	36.2	51.4	6.4	21.5	58 51.32	+ 0.62	71.75	+71.70	0 0 3.64
	γ Pegasi	16.5	30.2	43.8	57.6	11.4	3 43.90	+ 0.70	71.82	+71.71	0 4 56.31
	α Ursæ Minoris	35.0	47.0	2.0	13.5	27.0	0 0.90	- 7.12	.....	+71.77	1 1 5.55
	ζ Aurigæ	27.8	45.5	2.6	20.5	37.7	50 2.82	+ 0.54	.....	+72.05	4 51 15.41
	β Orionis	9.4	22.8	36.2	49.7	3.1	5 36.24	+ 0.82	72.11	+72.07	5 6 49.13
	β Tauri	25.5	40.7	55.7	10.8	25.9	14 55.72	+ 0.62	71.97	+72.08	5 16 8.42
	δ Orionis	8.8	22.0	35.4	48.6	1.9	22 35.34	+ 0.77	71.98	+72.09	5 23 48.20
	Vesta	18.2	32.7	47.3	1.8	16.5	56 47.30	+ 0.63	.....	+72.14	5 58 0.07
	δ Ursæ Min. S. P. ....	.....	57.0	40.0	22.0	5.5	22 39.65	+ 4.19	.....	+72.17	6 23 56.01
	Groombridge 1119....	28.0	57.0	26.5	55.0	27.0	42 26.70	-12.09	.....	+72.19	6 43 26.80
	δ Ursæ Minoris	20.5	2.5	46.0	28.5	11.5	22 45.80	- 2.83	.....	+73.04	18 23 56.01
Feb. 15	Sun 1 Limb	58.1	11.9	25.5	39.0	52.7	51 25.44	+ 0.87	.....	+73.29	21 52 39.60
	Sun 2 Limb	11.3	24.8	38.6	52.7	6.2	53 38.72	+ 0.87	.....	+73.29	21 51 52.88
	Venus 1 Limb	47.7	1.2	14.7	28.2	41.6	48 14.68	+ 0.84	.....	+73.36	22 49 28.88
	α Pegasi	2.2	16.0	29.7	43.5	57.2	55 29.72	+ 0.72	+73.37	+73.37	.....
	α Ursæ Minoris	32.0	45.0	0.0	13.0	26.5	59 59.30	- 7.10	.....	+73.49	1 1 5.69
Feb. 16	α Ursæ Minoris	28.0	41.0	56.0	8.5	22.0	59 55.10	- 5.25	.....	+74.92	.....
	(a) β Orionis	6.1	19.6	32.8	46.4	59.8	6 32.94	+ 0.83	+15.38	+15.16	5 6 48.93
	β Tauri	22.5	37.4	52.6	7.7	22.8	15 52.60	+ 0.66	15.00	+15.17	5 16 8.43
	α Orionis	45.8	59.2	12.7	26.1	39.6	46 12.68	+ 0.76	15.18	+15.20	5 46 28.64
	Vesta	13.7	28.3	43.0	57.6	12.1	57 42.94	+ 0.68	.....	+15.21	5 57 58.83
	μ Geminorum	29.9	44.4	58.8	13.2	27.6	12 58.78	+ 0.68	15.20	+15.23	6 13 14.69
	δ Geminorum	47.2	1.6	16.0	30.3	44.6	10 15.94	+ 0.69	15.27	+15.31	7 10 31.94
Feb. 18	Sun 1 Limb	31.4	44.2	58.3	12.1	25.7	3 58.34	+ 1.01	.....	+18.32	22 4 17.67
	Sun 2 Limb	43.8	57.4	11.0	24.6	38.2	6 11.00	+ 1.01	.....	+18.32	22 6 30.33
	α Pegasi	57.2	10.8	24.5	38.3	51.8	56 24.52	+ 0.84	+18.46	+18.38	22 56 43.74
	Venus 1 Limb	39.0	52.6	5.9	19.4	32.8	3 5.94	+ 0.99	.....	+18.39	23 3 25.32
	α Andromedæ	14.4	29.5	44.6	59.7	14.7	59 44.58	+ 0.75	18.33	+18.47	0 0 3.80
	γ Pegasi	9.7	23.4	37.1	50.8	4.6	4 37.12	+ 0.84	18.44	+18.47	0 4 56.43

(a) Clock put forward one minute.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Feb. 18	α Ursæ Minoris.....	28.5	41.0	54.0	7.0	21.0	0	54.30	- 9.19	.....	+ 18.54	.....
	ϕ Piscium.....	7.2	20.8	34.2	47.8	1.4	36	34.28	+ 0.87	.....	+ 18.59	1 36 53.74
	Moon 1 Limb.....	27.9	42.0	56.2	10.2	24.4	49	56.14	+ 0.86	.....	+ 18.61	1 50 15.61
	α Arietis.....	18.2	32.6	46.8	1.4	15.8	57	46.96	+ 0.78	+ 18.64	+ 18.63	1 58 6.37
	γ Arietis.....	53.3	7.4	21.5	35.7	50.2	29	21.62	+ 0.80	.....	+ 18.67	2 29 41.09
	γ Ceti.....	11.7	25.1	38.3	51.5	4.8	34	38.28	+ 0.91	18.75	+ 18.68	2 34 57.87
	ϕ Eridani.....	14.8	28.2	41.5	54.9	8.4	3	41.56	+ 0.97	.....	+ 18.80	4 4 1.33
	40 Eridani.....	6.0	19.4	32.7	45.8	59.5	7	32.68	+ 0.99	.....	+ 18.81	4 7 52.48
	47 Eridani.....	40.7	54.1	7.7	21.0	34.5	26	7.60	+ 0.99	.....	+ 18.84	4 26 27.43
	Vesta.....	16.8	31.3	45.8	0.5	15.0	57	45.88	+ 0.77	.....	+ 18.97	5 58 5.62
Feb. 19	δ Ursæ Minoris.....	13.0	57.0	40.0	23.0	6.5	23	39.90	- 2.78	.....	+ 20.01	.....
	Sun 1 Limb.....	20.2	34.0	47.7	1.2	14.8	7	47.58	+ 0.90	.....	+ 20.32	22 8 8.80
	Sun 2 Limb.....	32.7	46.3	0.0	13.6	27.2	9	59.96	+ 0.90	.....	+ 20.32	22 10 21.18
	Venus 1 Limb.....	.....	27.7	41.1	.....	7.9	7	41.09	+ 0.88	.....	+ 20.41	23 8 2.38
	Moon 1 Limb.....	45.8	0.4	15.1	29.6	44.1	47	15.00	+ 0.76	.....	+ 20.71	2 47 36.47
Feb. 20	δ Arietis.....	36.4	50.4	4.5	18.6	32.6	2	4.50	+ 0.74	.....	+ 20.73	3 2 25.97
	Sun 1 Limb.....	8.8	22.5	36.1	49.7	3.3	11	36.08	+ 1.13	.....	+ 22.35	22 11 59.56
	Sun 2 Limb.....	21.0	34.6	48.2	1.8	15.4	13	48.20	+ 1.13	.....	+ 22.35	22 14 11.68
	α Aurigæ.....	47.8	6.8	25.9	45.1	4.0	4	25.92	+ 0.63	+ 22.98	+ 22.92	5 4 49.47
	β Orionis.....	58.1	11.5	25.1	38.6	51.8	6	25.02	+ 1.11	22.96	+ 22.93	5 6 49.06
Feb. 21	μ Geminorum.....	22.0	36.4	50.7	5.2	19.6	12	50.78	+ 0.86	22.98	+ 23.02	6 13 14.66
	α Canis Majoris.....	12.6	26.6	40.4	54.3	8.2	37	40.42	+ 1.13	22.98	+ 23.07	6 38 4.62
	β Geminorum.....	32.6	47.8	2.8	18.0	33.1	35	2.86	+ 0.84	+ 25.51	+ 25.52	7 35 29.22
	ϵ Hydræ.....	23.0	36.6	49.9	3.3	16.5	37	49.86	+ 1.03	25.63	+ 25.62	8 38 16.51
	α Cygni.....	49.9	8.7	27.5	46.2	4.8	35	27.42	+ 0.66	+ 26.90	+ 26.68	20 35 54.76
Feb. 22	Sun 1 Limb.....	43.3	56.8	10.5	24.1	37.6	19	10.46	+ 1.24	.....	+ 26.83	22 19 38.53
	Sun 2 Limb.....	55.3	8.8	22.4	35.8	49.5	21	22.36	+ 1.24	.....	+ 26.83	22 21 50.43
	δ Persei.....	22.3	41.7	1.5	20.8	40.6	31	1.38	+ 0.63	.....	+ 27.30	3 31 29.31
	A. S. C. 416.....	52.7	7.2	21.5	35.8	50.3	38	21.50	+ 0.92	.....	+ 27.31	3 38 49.73
	ϕ Eridani.....	5.7	19.1	32.4	45.8	9.3	3	32.46	+ 1.24	.....	+ 27.35	4 4 1.05
	μ Tauri.....	53.0	6.4	19.7	33.2	46.7	6	19.80	+ 1.06	.....	+ 27.35	4 6 48.21
	α Aurigæ.....	43.3	2.4	21.5	40.4	59.5	4	21.42	+ 0.65	27.42	+ 27.45	5 4 49.52
	β Orionis.....	53.6	7.1	20.6	33.8	47.4	6	20.50	+ 1.22	27.34	+ 27.45	5 6 49.17
	β Tauri.....	9.7	21.8	39.9	55.1	10.2	15	39.94	+ 0.87	27.38	+ 27.46	5 16 8.27
	δ Orionis.....	53.0	6.2	19.5	32.6	45.8	23	19.42	+ 1.14	27.42	+ 27.48	5 23 48.04
	ϵ Orionis.....	8.5	21.8	35.4	48.4	1.7	27	35.16	+ 1.15	27.45	+ 27.48	5 28 3.79
	52 Orionis.....	27.2	40.6	53.8	7.2	20.5	38	53.86	+ 1.08	.....	+ 27.50	5 39 22.44
	136 Tauri.....	15.5	30.5	45.6	0.4	15.6	42	45.52	+ 0.88	.....	+ 27.50	5 43 13.90
	Moon 1 Limb.....	31.4	46.8	2.4	18.0	32.6	53	2.44	+ 0.90	.....	+ 27.52	5 53 20.86
	α Aurigæ.....	.....	.....	40.2	55.5	10.7	4	40.20	+ 0.85	.....	+ 27.51	6 5 8.59
Feb. 23	δ Ursæ Min. S. P. ....	.....	40.0	22.0	5.5	48.5	23	22.55	+ 8.08	.....	+ 27.57	.....
	ϵ Geminorum.....	5.1	19.7	31.5	49.4	3.8	33	34.50	+ 0.90	.....	+ 27.59	6 34 2.99
	Sun 1 Limb.....	29.8	43.3	56.8	10.4	23.9	22	56.84	+ 1.13	.....	+ 29.10	22 23 27.07
	Sun 2 Limb.....	41.5	55.0	8.6	22.1	35.7	25	8.58	+ 1.13	.....	+ 29.10	22 25 38.81
	Venus 1 Limb.....	27.2	40.5	53.9	7.4	20.8	25	53.96	+ 1.09	.....	+ 29.20	23 26 24.25
	α Andromedæ.....	3.5	18.6	33.6	48.7	3.8	59	33.64	+ 0.81	+ 29.19	+ 29.26	0 0 3.71
	γ Pegasi.....	58.8	12.3	26.2	39.8	53.6	4	26.14	+ 0.94	29.30	+ 29.26	0 4 56.34
	α Ursæ Minoris.....	16.0	29.0	.....	56.5	9.5	0	42.80	- 12.78	.....	+ 29.35	1 0 59.37
	α Arietis.....	7.3	21.5	35.7	50.2	4.7	57	35.88	+ 0.85	29.58	+ 29.44	1 58 6.17
	δ Persei.....	20.1	39.5	59.3	18.7	38.5	30	59.22	+ 0.59	.....	+ 29.59	3 31 29.40
	A. S. C. 416.....	50.6	4.8	19.3	33.7	48.3	38	19.34	+ 0.85	.....	+ 29.60	3 38 49.79
	ξ Persei.....	29.4	45.6	1.8	18.3	31.5	48	1.92	+ 0.71	.....	+ 29.61	3 48 32.27
	γ^1 Eridani.....	33.5	47.3	0.8	14.6	28.3	50	0.90	+ 1.17	29.61	+ 29.62	3 50 31.69

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
Feb. 23	<i>o</i> Eridani.....	<i>s.</i> 3.6	<i>s.</i> 16.8	<i>s.</i> 30.2	<i>s.</i> 43.5	<i>s.</i> 57.0	<i>m.</i> 3	<i>s.</i> 30.22	<i>s.</i> + 1.11	<i>s.</i> + 29.63	<i>h.</i> 4 <i>m.</i> 4 <i>s.</i> 0.96
	A. S. C. 467.....	58.6	19.2	39.7	0.4	20.8	5	39.74	+ 0.55	..... + 29.64	4 6 9.93
	16 Orionis.....	21.7	45.3	58.6	12.2	25.7	59	58.70	+ 0.97	..... + 29.71	5 0 29.38
	μ Aurigæ.....	22.1	38.8	55.8	13.8	29.7	1	56.04	+ 0.71	..... + 29.71	5 2 26.46
	ι Leporis.....	50.3	3.7	17.5	31.1	44.6	4	17.44	+ 1.15	..... + 29.72	5 4 48.31
	18 Orionis.....	10.8	24.4	38.1	51.5	5.2	6	38.00	+ 0.96	..... + 29.72	5 7 8.68
	τ Orionis.....	51.1	4.4	17.7	31.0	44.4	9	17.72	+ 1.11	..... + 29.72	5 9 48.55
	λ Leporis.....	12.4	26.2	39.6	53.3	7.2	11	39.74	+ 1.17	..... + 29.73	5 12 10.64
	23 Orionis.....	26.3	39.5	52.8	6.2	19.4	13	52.84	+ 1.02	..... + 29.73	5 14 23.59
	27 Orionis.....	21.6	34.8	48.2	1.5	14.7	15	48.16	+ 1.06	..... + 29.73	5 16 18.95
	\downarrow^2 Orionis.....	28.0	41.3	54.5	7.8	21.2	17	54.56	+ 1.02	..... + 29.74	5 18 25.32
	31 Orionis.....	37.4	50.6	3.8	17.0	30.4	21	3.84	+ 1.06	..... + 29.74	5 21 34.64
	ν Orionis.....	12.2	25.5	39.0	52.3	5.7	23	38.94	+ 1.11	..... + 29.75	5 24 9.80
	ϕ^1 Orionis.....	2.4	16.0	29.5	42.8	56.4	25	29.42	+ 0.97	..... + 29.75	5 26 0.14
	ϵ Orionis.....	6.3	19.6	32.8	46.2	59.5	27	32.88	+ 1.06	+ 29.81 + 29.75	5 28 3.69
	σ Orionis.....	43.6	56.8	10.2	23.5	36.8	30	10.18	+ 1.08	..... + 29.76	5 30 41.02
	ζ Orionis.....	41.8	55.1	8.4	21.7	34.9	32	8.38	+ 1.06	..... + 29.76	5 32 39.20
	ζ Leporis.....	42.5	56.2	9.8	23.7	37.5	39	9.94	+ 1.18	..... + 29.77	5 39 40.89
	55 Orionis.....	39.4	52.6	5.9	19.3	32.7	43	5.98	+ 1.12	..... + 29.77	5 43 36.87
	δ Aurigæ.....	2.6	25.4	48.1	10.6	33.4	45	48.02	+ 0.47	..... + 29.78	5 46 18.27
	θ Aurigæ.....	32.0	58.8	15.5	32.4	48.8	48	15.50	+ 0.72	..... + 29.78	5 48 46.00
	2 Monocerotis.....	29.2	42.5	56.2	9.4	22.8	50	56.02	+ 1.13	..... + 29.79	5 51 26.94
	μ Orionis.....	35.3	48.6	2.2	15.6	29.2	53	2.18	+ 0.97	..... + 29.79	5 53 32.94
	Vesta.....	45.4	59.7	14.4	28.8	43.4	58	14.34	+ 0.84	..... + 29.80	5 58 44.98
	τ Leporis.....	43.4	57.2	11.7	25.7	39.8	0	11.56	+ 1.22	..... + 29.80	6 0 42.58
	α Aurigæ.....	7.5	22.5	38.1	53.3	8.5	4	37.98	+ 0.80	..... + 29.81	6 5 8.59
	5 Monocerotis.....	3.7	17.2	30.6	43.9	57.3	6	30.54	+ 1.10	..... + 29.81	6 7 1.45
	δ Ursæ Min. S. P.....	55.0	36.5	19.0	3.5	45.5	23	19.90	+ 7.15	..... + 29.83	6 23 56.88
	14 Monocerotis.....	6.8	20.6	33.7	47.2	0.7	25	33.80	+ 0.98	..... + 29.83	6 26 4.61
	ϵ Geminorum.....	3.0	17.5	32.4	47.2	1.7	33	32.36	+ 0.84	..... + 29.84	6 34 3.04
	16 Monocerotis.....	49.3	2.7	16.2	29.7	43.1	37	16.20	+ 0.97	..... + 29.85	6 37 47.02
	θ Canis Majoris.....	45.8	59.4	13.2	26.6	40.3	46	13.06	+ 1.15	..... + 29.86	6 46 44.07
	Moon 1 Limb.....	38.4	53.2	9.1	24.7	39.9	55	9.06	+ 0.85	..... + 29.87	6 55 39.78
	63 Aurigæ.....	31.4	48.5	5.7	23.2	40.5	0	5.86	+ 0.69	..... + 29.88	7 0 36.43
	ι Geminorum.....	44.3	59.4	14.4	29.5	44.6	15	14.44	+ 0.81	..... + 29.90	7 15 45.15
	β Canis Minoris.....	28.8	42.4	55.7	9.2	22.6	17	55.74	+ 0.97	..... + 29.90	7 18 26.61
	25 Monocerotis.....	20.4	33.7	47.1	0.2	13.5	28	46.98	+ 1.08	..... + 29.92	7 29 17.98
	β Geminorum.....	28.3	43.4	58.5	13.6	28.7	34	58.50	+ 0.81	29.88 + 29.93	7 35 29.24
	π Canis Minoris.....	27.6	41.4	55.2	8.5	22.2	36	54.98	+ 0.96	..... + 29.93	7 37 25.87
	14 Canis Minoris.....	3.8	17.0	30.4	43.7	56.8	49	30.34	+ 1.02	..... + 29.95	7 50 1.31
	55 Camelopardi.....	3.0	40.2	17.0	53.7	30.8	56	16.94	+ 0.01	..... + 29.96	7 56 46.91
Feb. 24	δ Geminorum.....	30.4	44.7	59.2	13.6	27.8	9	59.14	+ 0.84	+ 31.85 + 31.88	7 10 31.86
	ι Geminorum.....	42.2	57.4	12.6	27.5	42.6	15	12.46	+ 0.79	..... + 31.89	7 15 45.14
	β Canis Minoris.....	26.8	40.2	53.7	7.2	20.5	17	53.68	+ 0.95	..... + 31.89	7 18 26.52
	α Geminorum preced.....	16.5	.....	48.0	.....	19.5	23	48.00	+ 0.75	} 31.83 { + 31.90	7 24 20.65
	α Geminorum follow.....	.....	32.7	.....	4.2	.....	23	48.45	+ 0.75		7 24 21.10
	α Canis Minoris.....	54.1	7.5	20.8	31.1	47.5	30	20.80	+ 0.97	31.96 + 31.91	7 30 53.68
	26 Monocerotis.....	34.7	48.4	1.7	15.3	28.6	33	1.74	+ 1.10	..... + 31.91	7 33 31.75
	β Geminorum.....	26.0	41.2	56.5	11.6	26.8	34	56.42	+ 0.78	31.98 + 31.92	7 35 29.12
	4 Argûs.....	33.1	46.8	0.7	14.2	28.0	38	0.56	+ 1.14	..... + 31.92	7 38 33.62
	14 Canis Minoris.....	1.7	15.0	28.4	41.7	51.9	49	28.34	+ 0.99	..... + 31.94	7 50 1.27
	Moon 1 Limb.....	44.2	59.3	14.4	29.6	44.7	54	14.44	+ 0.83	..... + 31.94	7 51 47.21
	λ Cancrî.....	57.4	11.7	26.5	41.0	55.7	10	26.46	+ 0.82	..... + 31.97	8 10 59.25
	γ Cancrî.....	58.2	12.5	26.9	41.2	55.6	33	26.88	+ 0.84	..... + 32.01	8 33 59.73
	ϵ Hydræ.....	16.7	30.2	43.6	56.9	10.4	37	43.56	+ 0.97	31.97 + 32.01	8 38 16.51
Feb. 25	Sun 1 Limb.....	0.8	14.3	27.8	41.5	54.8	30	27.84	+ 1.08	..... + 33.30	22 31 2.22

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpolated.	
Feb. 25	Sun 2 Limb.....	12.4	25.8	39.2	52.7	6.2	32	39.26	+ 1.08	.....	+ 33.30	22 33 13.64
	α Pegasi.....	42.0	55.8	9.4	23.4	37.0	56	9.52	+ 0.89	+ 33.43	+ 33.33	22 56 43.74
	Venus 1 Limb.....	30.4	43.8	57.2	10.7	23.8	34	57.18	+ 1.03	.....	+ 33.39	23 35 31.60
	α Ursæ Minoris.....	10.0	23.5	.....	.....	5.0	0	37.23	- 11.72	.....	+ 33.53	1 0 59.04
	α Arietis.....	2.8	17.4	31.7	46.2	0.6	57	31.74	+ 0.82	33.73	+ 33.61	1 58 6.17
	A. S. C. 416.....	46.2	0.7	15.2	29.6	44.0	38	15.14	+ 0.82	.....	+ 33.77	3 38 49.73
	γ^1 Eridani.....	29.2	43.0	56.7	10.4	24.2	49	56.70	+ 1.11	33.83	+ 33.78	3 50 31.59
	μ Persei.....	52.3	12.0	31.8	51.7	11.6	2	31.88	+ 0.56	.....	+ 33.80	4 3 6.24
	A. S. C. 467.....	54.5	14.8	35.7	56.4	16.8	5	35.64	+ 0.54	.....	+ 33.81	4 6 9.99
	τ Orionis.....	46.8	0.2	13.4	26.7	40.2	9	13.46	+ 1.05	.....	+ 33.90	5 9 48.41
	λ Leporis.....	8.3	21.7	35.8	49.2	2.6	11	35.52	+ 1.11	.....	+ 33.91	5 12 10.54
	23 Orionis.....	21.8	35.4	48.6	1.7	15.0	13	48.50	+ 0.97	.....	+ 33.91	5 14 23.38
	27 Orionis.....	17.5	30.7	43.8	57.3	10.5	15	43.96	+ 1.01	.....	+ 33.91	5 16 18.88
	ψ^2 Orionis.....	23.8	37.1	50.6	3.7	17.2	17	50.48	+ 0.97	.....	+ 33.92	5 18 25.37
	31 Orionis.....	33.2	46.4	59.7	12.8	26.2	20	59.66	+ 1.01	.....	+ 33.92	5 21 34.59
	ν Orionis.....	8.0	21.4	34.7	48.1	1.6	23	34.76	+ 1.05	.....	+ 33.93	5 24 9.74
	ϕ^1 Orionis.....	58.5	11.8	25.4	38.7	52.2	25	25.32	+ 0.92	.....	+ 33.93	5 26 0.17
	ϵ Orionis.....	2.2	15.6	28.8	42.2	55.5	27	28.86	+ 1.01	33.84	+ 33.93	5 28 3.80
	σ Orionis.....	39.5	52.7	6.2	19.5	32.6	30	6.10	+ 1.03	.....	+ 33.94	5 30 41.07
	ζ Orionis.....	37.8	51.0	4.3	17.6	30.9	32	4.32	+ 1.01	.....	+ 33.94	5 32 39.27
	ζ Leporis.....	38.2	52.0	5.7	19.5	33.3	39	5.74	+ 1.12	.....	+ 33.95	5 39 40.81
	55 Orionis.....	35.0	48.4	1.8	15.3	28.6	43	1.82	+ 1.07	.....	+ 33.95	5 43 36.84
	δ Aurigæ.....	58.5	21.1	43.7	6.6	29.5	45	43.88	+ 0.45	.....	+ 33.96	5 46 18.29
	θ Aurigæ.....	38.2	54.7	11.5	28.1	44.8	48	11.46	+ 0.69	.....	+ 33.96	5 48 46.11
	2 Monocerotis.....	24.8	38.5	51.9	5.4	18.8	50	51.88	+ 1.08	.....	+ 33.97	5 51 26.93
	μ Orionis.....	31.1	44.4	57.9	11.4	24.8	52	57.92	+ 0.92	.....	+ 33.97	5 53 32.81
	Vesta.....	22.6	36.8	51.7	6.5	20.8	58	51.68	+ 0.80	.....	+ 33.98	5 59 26.46
	δ Ursæ Min. S. P. ....	.....	34.5	17.0	1.0	44.0	23	17.68	+ 6.60	.....	+ 34.02	6 23 58.30
	ψ^2 Canis Majoris.....	29.4	42.8	56.6	10.4	24.2	38	56.68	+ 1.12	.....	+ 34.04	6 39 31.84
	Groombridge 1119....	.....	36.0	2.0	29.0	1.0	43	2.70	- 19.76	.....	+ 34.04	6 43 16.98
	19 Monocerotis.....	54.8	8.2	21.6	34.8	48.2	54	21.52	+ 1.03	.....	+ 34.06	6 54 56.61
	63 Aurigæ.....	27.3	44.5	1.7	18.8	36.3	0	1.72	+ 0.67	.....	+ 34.07	7 0 36.46
	β Canis Minoris.....	21.7	38.3	51.7	5.0	18.5	17	51.64	+ 0.93	.....	+ 34.10	7 18 26.67
	α Geminorum preced. ....	.....	30.2	.....	1.6	.....	23	45.90	+ 0.75	} 33.95	+ 34.11	7 24 20.76
	α Geminorum follow.	14.7	.....	46.4	.....	17.7	23	46.27	+ 0.75		+ 34.11	7 24 21.13
	25 Monocerotis.....	16.2	29.5	42.7	56.1	9.4	28	42.78	+ 1.03		+ 34.11	7 29 17.92
	π Canis Minoris.....	23.8	37.4	50.8	4.4	18.0	36	50.88	+ 0.91	.....	+ 34.12	7 37 25.91
	A. S. C. 968.....	46.2	59.7	13.2	26.6	40.1	46	13.16	+ 0.92	.....	+ 34.14	7 46 48.22
	13 Argus.....	53.4	6.5	19.7	33.2	46.5	53	19.86	+ 0.97	.....	+ 34.15	7 53 54.98
	γ Cancri.....	56.2	10.4	24.7	39.0	53.4	33	24.74	+ 0.83	.....	+ 34.21	8 33 59.78
	Moon 1 Limb.....	49.0	3.5	18.2	32.7	47.5	49	18.18	+ 0.86	.....	+ 34.23	8 49 53.27
	λ Leonis.....	29.4	44.1	58.7	13.3	27.7	21	58.61	+ 0.81	.....	+ 34.28	9 22 33.73
	\circ Leonis.....	33.2	46.3	0.0	13.5	27.2	32	0.04	+ 0.92	.....	+ 34.30	9 32 35.26
Feb. 26	Sun 1 Limb.....	.....	.....	12.4	25.8	39.2	34	12.32	+ 1.05	.....	+ 35.47	22 34 48.84
	Sun 2 Limb.....	56.5	10.0	23.6	36.9	50.4	36	23.48	+ 1.05	.....	+ 35.47	22 37 0.00
	α Ursæ Minoris.....	9.0	22.5	35.5	46.5	2.5	0	35.20	- 11.74	.....	+ 35.69	.....
	α Canis Majoris.....	59.6	13.3	27.2	41.0	54.6	37	27.14	+ 1.11	+ 36.20	+ 36.20	6 38 4.45
	θ Canis Majoris.....	40.0	53.1	6.7	20.2	33.7	46	6.80	+ 1.07	.....	+ 36.21	6 46 44.08
	γ Canis Majoris.....	24.9	38.7	52.5	6.1	20.0	55	52.44	+ 1.10	.....	+ 36.22	6 56 29.76
	63 Aurigæ.....	21.7	42.2	59.6	16.8	34.0	59	59.16	+ 0.65	.....	+ 36.23	7 0 36.34
	δ Geminorum.....	26.1	40.1	54.7	9.3	23.6	9	54.82	+ 0.81	36.18	+ 36.24	7 10 31.87
	η Canis Minoris.....	19.9	33.6	46.7	0.3	13.7	18	46.84	+ 0.93	.....	+ 36.26	7 19 24.03
	α Geminorum preced.	11.9	.....	43.6	.....	15.0	23	43.50	+ 0.73	} 36.27	+ 36.27	7 24 20.50
	α Geminorum follow. ....	.....	28.3	.....	59.8	.....	23	44.05	+ 0.73		+ 36.27	7 24 21.05
	α Canis Minoris.....	49.8	3.2	16.6	29.8	43.2	30	16.52	+ 0.94	36.26	+ 36.28	7 30 53.74
	26 Monocerotis.....	30.4	43.8	57.4	10.7	24.3	32	57.32	+ 0.95	.....	+ 36.28	7 33 34.55
	β Geminorum.....	21.8	37.0	52.1	7.2	22.4	34	52.10	+ 0.75	36.32	+ 36.28	7 35 29.13

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
Feb. 26	A. S. C. 968.....	44.1	57.5	10.8	24.4	37.7	46 10.90	+ 0.90	.....	+ 36.30	h. m. s. 7 46 48.10
	13 Argûs.....	50.9	4.2	17.6	30.8	44.2	53 17.54	+ 0.95	.....	+ 36.31	7 53 54.80
	o Leonis.....	30.7	44.2	57.8	11.3	24.7	31 57.74	+ 0.90	.....	+ 36.45	9 32 35.09
	Moon 1 Limb.....	49.6	3.8	18.1	32.1	46.4	40 18.00	+ 0.89	.....	+ 36.46	9 40 55.35
Feb. 27	Sun 1 Limb.....	.....	.....	56.4	9.8	23.3	37 56.37	+ 1.04	.....	+ 37.61	22 38 35.02
	Sun 2 Limb.....	40.6	53.8	7.5	20.8	34.2	40 7.38	+ 1.04	.....	+ 37.61	22 40 46.03
	Venus 1 Limb.....	31.6	44.8	58.1	11.5	24.8	43 58.16	+ 1.00	.....	+ 37.70	23 44 36.86
	α Andromedæ.....	54.7	9.8	25.1	39.8	55.2	59 24.92	+ 0.75	+ 37.96	+ 37.73	0 0 3.40
	γ Pegasi.....	50.4	4.0	17.7	31.4	45.2	4 17.74	+ 0.86	37.78	+ 37.73	0 4 56.33
	α Ursæ Minoris.....	.....	17.5	31.0	45.0	58.0	0 31.25	- 11.38	.....	+ 37.81	1 0 57.68
	α Arietis.....	58.7	13.2	27.6	41.8	56.5	57 27.56	+ 0.79	37.92	+ 37.90	1 58 6.25
	μ Persei.....	47.7	7.7	27.6	47.6	7.5	2 27.62	+ 0.54	.....	+ 38.08	4 3 6.24
	A. S. C. 467.....	50.2	10.7	31.5	52.2	12.7	5 31.46	+ 0.52	.....	+ 38.09	4 6 10.07
	23 Orionis.....	17.4	30.8	44.4	57.6	11.0	13 44.24	+ 0.94	.....	+ 38.18	5 14 23.36
	ξ Leporis.....	2.7	16.4	29.8	43.8	57.5	15 30.04	+ 0.92	.....	+ 38.18	5 16 9.14
	ψ ² Orionis.....	19.5	32.8	46.2	59.6	12.8	17 46.18	+ 0.94	.....	+ 38.18	5 18 25.30
	δ Orionis.....	42.4	55.5	8.7	22.0	35.4	23 8.80	+ 0.97	38.14	+ 38.19	5 23 47.96
	φ ¹ Orionis.....	53.9	7.5	21.1	34.5	47.8	25 20.96	+ 0.90	.....	+ 38.19	5 26 0.05
	ρ ² Orionis.....	58.8	12.4	25.7	39.3	52.7	27 25.78	+ 0.90	.....	+ 38.20	5 28 4.88
	σ Orionis.....	35.1	48.6	1.8	15.1	28.5	30 1.82	+ 1.00	.....	+ 38.20	5 30 41.02
	ζ Orionis.....	33.5	46.7	59.9	13.3	26.5	31 59.98	+ 0.98	.....	+ 38.20	5 32 39.16
	ζ Leporis.....	34.0	47.7	1.5	15.3	29.1	39 1.52	+ 1.09	.....	+ 38.21	5 39 40.82
	55 Orionis.....	30.8	44.4	57.6	11.0	24.5	42 57.66	+ 1.03	.....	+ 38.22	5 43 36.91
	δ Aurigæ.....	54.2	16.7	39.5	2.3	24.7	45 39.48	+ 0.44	.....	+ 38.22	5 46 18.14
	θ Aurigæ.....	33.6	50.4	7.1	23.8	40.5	48 7.08	+ 0.67	.....	+ 38.22	5 48 45.97
	2 Monocerotis.....	20.6	34.3	47.6	1.1	14.5	50 47.62	+ 1.05	.....	+ 38.23	5 51 26.90
	μ Orionis.....	26.7	40.3	53.6	7.1	20.6	52 53.66	+ 0.89	.....	+ 38.23	5 53 32.78
	66 Orionis.....	23.4	36.7	50.1	3.4	16.7	55 50.06	+ 0.94	.....	+ 38.23	5 56 29.23
	Vesta.....	0.7	15.4	30.1	44.7	59.6	59 30.10	+ 0.78	.....	+ 38.24	6 0 9.12
	1 Lyncis.....	31.2	59.6	27.8	55.5	23.6	2 27.54	+ 0.29	.....	+ 38.24	6 3 6.07
	μ Geminorum.....	6.6	21.2	35.5	49.8	4.3	12 35.48	+ 0.79	38.25	+ 38.26	6 13 14.53
	δ Ursæ Min. S. P....	.....	31.0	14.0	56.5	40.0	23 13.92	+ 6.40	.....	+ 38.28	6 23 58.60
	16 Monocerotis.....	40.5	54.3	7.7	21.2	34.7	37 7.68	+ 0.90	.....	+ 38.29	6 37 46.87
	Groombridge 1119....	1.5	28.5	56.0	27.0	56.5	42 57.90	- 19.19	.....	+ 38.30	6 43 17.01
	20 Monocerotis.....	9.5	22.6	35.8	49.3	2.6	1 35.96	+ 1.00	.....	+ 38.33	7 2 15.29
	ε Canis Minoris.....	46.2	59.5	13.2	26.6	40.2	16 13.14	+ 0.89	.....	+ 38.35	7 16 52.38
	η Canis Minoris.....	18.2	31.4	44.6	58.1	11.5	18 44.76	+ 0.92	.....	+ 38.35	7 19 24.03
	25 Monocerotis.....	11.8	25.3	38.6	51.7	5.3	28 38.54	+ 1.00	.....	+ 38.37	7 29 17.91
	4 Argûs.....	26.6	40.4	54.2	7.7	21.6	37 54.10	+ 1.08	.....	+ 38.38	7 38 33.56
	14 Canis Minoris.....	55.3	8.7	22.2	35.4	48.7	49 22.06	+ 0.94	.....	+ 38.40	7 50 1.40
	13 Argûs.....	49.0	2.4	15.6	28.8	42.3	53 15.62	+ 0.94	.....	+ 38.40	7 53 54.96
	Groombridge 1418....	1.5	55.0	48.0	41.5	35.0	7 48.20	- 3.42	.....	+ 38.42	8 8 23.20
	Groomb. 3402 S. P....	44.0	55.0	8.0	25.0	34.0	43 9.20	+ 14.59	.....	+ 38.47	8 44 2.26
	Groomb. 3548 S. P....	5.0	34.0	3.0	32.5	1.5	29 3.20	+ 6.05	.....	+ 38.53	9 29 47.78
	α Leonis.....	43.0	56.6	10.2	23.8	37.5	59 10.22	+ 0.88	38.38	+ 38.58	9 59 49.68
	Groombridge 1620....	.....	19.5	53.0	27.5	.....	4 53.33	- 2.95	.....	+ 38.59	10 5 28.97
	γ Leonis preceding...	59.5	.....	27.8	.....	56.2	10 27.83	+ 0.82	.....	+ 38.59	10 11 7.24
	γ Leonis following...	.....	13.8	.....	42.2	.....	10 28.00	+ 0.82	.....	+ 38.59	10 11 7.41
	Moon 1 Limb.....	22.2	36.1	50.0	3.7	17.5	27 49.90	+ 0.91	.....	+ 38.62	10 28 29.43
	53 Leonis.....	42.7	56.5	10.1	23.6	37.2	40 10.02	+ 0.88	.....	+ 38.63	10 40 49.53
	χ Leonis.....	38.3	51.6	5.1	18.3	31.8	56 5.02	+ 0.90	.....	+ 38.65	10 56 44.57
	Groomb. 4101 S. P....	26.0	58.5	28.5	5.0	37.0	26 31.00	+ 6.15	.....	+ 38.70	11 27 15.85
	Mars 1 Limb.....	52.1	.....	18.9	.....	45.8	49 18.93	+ 0.93	.....	+ 38.73	11 49 58.59
	Mars 2 Limb.....	.....	6.7	.....	33.4	.....	49 20.05	+ 0.93	.....	+ 38.73	11 49 59.71
Feb. 28	α Leonis.....	40.8	54.5	8.2	21.8	35.5	59 8.16	+ 0.88	+ 40.44	+ 40.57	9 59 49.61
	53 Leonis.....	40.6	54.2	7.7	21.4	34.8	40 7.74	+ 0.88	.....	+ 40.62	10 40 49.24

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.			
		I.	II.	III.	IV.	V.			observed.	interpo- lated.				
Feb. 28	δ Leonis	^{s.} 24.4	^{s.} 38.6	^{s.} 52.8	^{s.}	^{s.}	^{m.} 4	^{s.} 52.86	^{s.} + 0.81	^{s.} +40.76	^{s.} +40.66	^{h.} 11	^{m.} 5	^{s.} 34.33
	δ Hydræ & Crateris...	10.2	23.8	37.7	.....	.....	10	37.58	+ 1.08	40.76	+40.67	11	11	19.33
	Moon 2 Limb.....	26.2	39.6	53.5	6.8	20.6	14	53.34	+ 0.95	.....	+40.68	11	15	34.97
	ν Leonis .....	.....	.....	2.4	.....	29.2	28	2.52	+ 0.97	.....	+40.70	11	28	44.19
	β Leonis.....	43.6	57.2	11.0	24.8	38.6	40	11.04	+ 0.86	40.65	+40.72	11	40	52.62
	β Virginis.....	.....	.....	38.6	51.8	5.3	41	38.60	+ 0.94	.....	+40.73	11	42	20.27
	Mars 1 Limb .....	.....	50.2	.....	16.8	.....	48	3.50	+ 0.93	.....	+40.74	11	48	45.17
	Mars 2 Limb	38.0	.....	4.6	.....	31.2	48	4.60	+ 0.93	.....	+40.74	11	48	46.27
Mar. 1	Sun 1 Limb.....	55.6	.....	.....	.....	49.4	45	22.50	+ 0.98	.....	+41.89	22	46	5.37
	Sun 2 Limb.....	6.6	20.0	33.5	46.8	0.4	47	33.46	+ 0.98	.....	+41.89	22	48	16.33
	α Tauri.....	30.7	44.7	58.6	12.5	26.5	25	58.60	+ 0.81	+42.49	+42.49	.....	.....	.....
	Mars 1 Limb	19.8	.....	46.4	.....	13.0	46	46.40	+ 0.88	.....	+42.57	11	47	29.85
	Mars 2 Limb .....	.....	34.2	.....	0.8	.....	46	47.50	+ 0.88	.....	+42.57	11	47	30.95
	A. S. C. 1390	22.7	36.4	49.7	3.1	16.4	54	49.66	+ 0.87	+42.51	+42.57	11	55	33.10
	Moon 2 Limb	56.8	10.3	23.8	37.6	51.1	58	23.92	+ 0.95	.....	+42.57	11	59	7.44
	10 Virginis	18.2	31.4	44.6	57.8	11.2	0	44.64	+ 0.89	42.40	+42.57	12	1	28.10
	η Virginis.....	31.8	45.1	58.4	11.6	25.1	10	58.40	+ 0.92	42.71	+42.57	12	11	41.89
	17 Virginis.....	12.4	25.6	39.1	52.5	5.8	13	39.08	+ 0.88	42.58	+42.57	12	14	22.53
	A. S. C. 1434	57.5	10.8	24.3	37.6	50.8	19	24.20	+ 0.88	42.71	+42.57	12	20	7.65
	21 Virginis.....	19.4	33.1	46.5	59.8	13.2	24	46.40	+ 0.99	42.51	+42.57	12	25	29.96
Mar. 2	Venus 1 Limb.....	.....	.....	27.5	40.8	54.1	57	27.47	+ 0.93	.....	+43.71	23	58	12.11
	α Andromedæ	48.8	3.8	19.1	34.2	49.3	59	19.04	+ 0.71	+43.87	+43.71	0	0	3.46
	α Ursæ Minoris	55.5	9.5	.....	35.0	49.0	0	22.30	- 10.67	.....	+43.81	1	0	55.44
	θ Cassiopeæ	48.7	11.6	34.4	57.2	19.8	0	34.34	+ 0.42	.....	+43.81	1	1	18.57
	α Arietis.....	52.8	7.2	21.5	35.7	50.1	57	21.46	+ 0.75	44.02	+43.90	1	58	6.11
	α Tauri	29.4	43.2	56.8	10.5	24.5	25	56.88	+ 0.81	44.19	+44.14	4	26	41.83
	α Orionis.....	16.4	29.8	43.4	56.7	10.3	45	43.32	+ 0.87	44.24	+44.25	5	46	28.44
	66 Orionis.....	17.5	30.7	44.1	57.4	10.7	55	44.08	+ 0.89	.....	+44.27	5	56	29.24
	Vesta.....	8.4	23.1	37.7	52.4	7.3	0	37.78	+ 0.74	.....	+44.27	6	1	22.79
	2 Lynceis.....	50.8	16.6	42.5	8.5	34.3	4	42.54	+ 0.33	.....	+44.28	6	5	27.15
	7 Monocerotis	46.7	0.0	13.4	27.0	40.5	11	13.52	+ 0.98	.....	+44.29	6	11	58.79
	δ Ursæ Min. S. P.	43.0	25.5	8.0	52.0	34.5	23	8.60	+ 6.01	.....	+44.31	6	23	58.92
	14 Monocerotis	52.7	6.0	19.4	32.8	46.4	25	19.46	+ 0.86	.....	+44.31	6	26	4.63
	42 Camelopardi	16.7	52.1	27.1	2.0	37.4	33	27.06	+ 0.08	.....	+44.32	6	34	11.46
	18 Monocerotis	17.5	30.7	44.1	57.5	10.7	38	44.10	+ 0.90	.....	+44.33	6	39	29.33
	15 Lynceis.....	46.2	11.7	36.8	2.5	28.2	42	37.08	+ 0.34	.....	+44.33	6	43	21.75
	γ Canis Majoris	17.3	30.7	44.4	58.3	12.2	55	44.58	+ 1.03	.....	+44.35	6	56	29.96
	20 Monocerotis.....	3.3	16.6	30.0	43.4	56.7	1	30.00	+ 0.95	.....	+44.36	7	2	15.31
	22 Monocerotis.....	28.2	41.5	54.7	7.8	21.3	2	54.70	+ 0.92	.....	+44.36	7	3	39.98
	δ Geminorum	18.0	32.4	46.6	1.1	15.5	9	46.72	+ 0.76	44.29	+44.37	7	10	31.85
	η Canis Minoris	11.9	25.3	38.7	52.2	5.5	18	38.72	+ 0.87	.....	+44.38	7	19	23.97
	α Geminorum preced.	.....	19.8	.....	51.4	.....	23	35.60	+ 0.68	{ 44.20 }	+44.39	7	24	20.67
	α Geminorum follow.	4.6	.....	36.3	.....	7.4	23	36.10	+ 0.68		+44.39	7	24	21.17
	26 Monocerotis	22.4	36.0	49.5	2.9	16.5	32	49.46	+ 0.99	.....	+44.40	7	33	34.85
	π Canis Minoris	13.6	27.1	40.5	54.2	7.7	36	40.62	+ 0.84	.....	+44.41	7	37	25.87
	Groombridge 1418 ...	54.0	47.5	40.0	35.0	27.5	7	40.80	- 3.21	.....	+44.45	8	8	22.04
	Groomb. 3402 S. P.	46.0	53.5	3.0	17.0	31.0	43	6.10	+ 13.74	.....	+44.50	8	44	4.34
	Groomb. 3548 S. P.	2.5	29.5	59.0	28.0	57.0	28	59.20	+ 5.69	.....	+44.57	9	29	49.46
	Groombridge 1620 ...	38.5	12.5	47.0	22.0	56.0	4	47.20	- 2.77	.....	+44.62	10	5	29.05
	Groomb. 4101 S. P.	19.0	52.0	24.0	58.0	32.0	26	25.00	+ 5.77	.....	+44.73	11	27	15.50
	Mars 1 Limb .....	.....	13.8	.....	40.6	.....	45	27.20	+ 0.88	.....	+44.76	11	46	12.84
	Mars 2 Limb	1.6	.....	28.2	.....	55.0	45	28.27	+ 0.88	.....	+44.76	11	46	13.91
Mar. 4	Sun 1 Limb.....	2.2	15.7	29.2	42.6	56.0	56	29.14	+ 0.83	.....	+47.77	22	57	27.74
	Sun 2 Limb.....	12.5	25.8	39.5	52.7	6.3	58	39.36	+ 0.83	.....	+47.77	22	59	27.96
	α Andromedæ	44.8	0.0	15.2	30.3	45.4	59	15.14	+ 0.63	+47.85	+47.86	0	0	3.63

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Mar. 4	Venus 1 Limb.....	^{s.} 58.7	^{s.} 11.8	^{s.} 25.3	^{s.} 38.7	^{s.} 52.1	^{m.} 6	^{s.} 25.32	+ 0.79	^{s.}	^{s.} +47.87	^{h.} 0 ^{m.} 7 ^{s.} 13.98
	α Ursæ Minoris.....	51.0	.....	15.5	29.0	43.0	0	16.30	-- 7.83	.....	+47.94	.....
	α Arietis.....	48.7	3.2	17.6	31.8	46.4	57	17.54	+ 0.65	+48.02	+48.02	1 58 6.21
Mar. 5	α Geminorum preced.	58.3	.....	29.6	.....	1.1	23	29.67	+ 0.63	{ +50.20 }	+50.32	7 24 20.62
	α Geminorum follow.	.....	14.4	.....	45.7	.....	23	30.05	+ 0.63		+50.32	7 24 21.00
	α Canis Minoris.....	35.7	49.0	2.4	15.7	29.1	30	2.38	+ 0.79	50.47	+50.33	7 30 53.50
	β Geminorum.....	7.8	23.0	38.1	53.2	8.4	34	38.10	+ 0.65	50.34	+50.34	7 35 29.09
	4 Argûs.....	14.6	28.3	42.0	55.6	9.4	37	41.98	+ 0.91	.....	+50.34	7 38 33.23
	6 Argûs.....	7.1	21.0	35.0	48.8	2.6	41	34.90	+ 0.92	.....	+50.35	7 42 26.17
	9 Argûs.....	1.7	15.2	29.0	42.5	56.4	43	28.96	+ 0.91	.....	+50.35	7 44 20.22
	28 Monocerotis.....	45.5	58.7	12.1	25.3	38.6	52	12.04	+ 0.82	.....	+50.36	7 53 3.22
	ε Hydræ.....	58.5	11.7	25.3	38.7	52.0	37	25.24	+ 0.78	50.44	+50.42	8 38 16.44
	α Hydræ.....	24.2	37.5	50.8	4.3	17.6	18	50.88	+ 0.87	50.44	+50.49	9 19 42.24
	Groomb. 4101 S. P....	13.0	45.5	19.0	51.5	25.0	26	18.80	+ 4.55	.....	+50.68	11 27 14.03
	Mars 1 Limb.....	52.5	.....	19.4	.....	46.1	41	19.33	+ 0.78	.....	+50.71	11 42 10.82
	Mars 2 Limb.....	.....	6.6	.....	33.7	.....	41	20.15	+ 0.78	.....	+50.71	11 42 11.64
Mar. 6	Sun 1 Limb.....	24.0	37.4	50.8	4.2	17.4	3	50.76	+ 0.88	.....	+51.76	23 4 43.40
	Sun 2 Limb.....	33.8	47.3	0.5	14.0	27.6	6	0.64	+ 0.88	.....	+51.76	23 6 53.28
	Venus 1 Limb.....	55.8	9.1	.....	.....	.....	15	22.44	+ 0.84	.....	+51.87	0 16 15.15
	μ Aurigæ.....	59.4	16.1	33.2	50.0	7.1	1	33.16	+ 0.59	.....	+52.31	5 2 26.06
	β Tauri.....	44.5	59.7	14.7	29.8	45.1	15	14.76	+ 0.67	+52.55	+52.33	5 16 7.76
	δ Orionis.....	27.7	41.3	54.6	7.8	21.1	22	54.50	+ 0.84	52.46	+52.34	5 23 47.68
	ε Orionis.....	44.0	57.2	10.6	23.8	37.1	27	10.54	+ 0.85	52.18	+52.35	5 28 3.74
	α Orionis.....	8.5	21.8	35.2	48.5	2.2	45	35.24	+ 0.80	52.33	+52.37	5 46 28.41
	α Canis Majoris.....	43.6	57.2	11.1	24.8	38.5	37	11.04	+ 0.94	52.34	+52.45	6 38 4.43
	Mars 1 Limb.....	.....	40.2	.....	7.3	.....	39	53.75	+ 0.80	.....	+52.88	11 40 47.43
	Mars 2 Limb.....	28.1	.....	54.8	.....	21.5	39	54.80	+ 0.80	.....	+52.88	11 40 48.48
Mar. 8	α Geminorum preced.	.....	7.4	.....	38.7	.....	23	23.05	+ 0.83	{ +56.58 }	+56.66	7 24 20.54
	α Geminorum follow.	52.0	.....	23.6	.....	54.7	23	23.43	+ 0.83		+56.66	7 24 20.92
	α Canis Minoris.....	29.2	42.5	55.7	9.0	22.5	29	55.78	+ 1.08	56.75	+56.66	7 30 53.52
Mar. 9	Venus 1 Limb.....	20.4	33.6	47.0	0.3	13.6	28	46.98	+ 1.11	.....	+58.37	0 29 46.46
	α Ursæ Minoris.....	.....	55.0	.....	20.0	35.0	0	8.13	-14.17	.....	+58.42	1 0 52.38
	α Arietis.....	37.7	52.3	6.6	20.8	35.4	57	6.56	+ 0.92	+58.68	+58.52	1 58 6.00
	α Aurigæ.....	11.4	30.5	49.5	8.7	27.7	3	49.56	+ 0.65	58.93	+58.83	5 4 49.01
	β Orionis.....	21.7	35.2	48.6	2.1	15.5	5	48.62	+ 1.21	58.97	+58.83	5 6 48.66
	τ Orionis.....	21.3	34.7	48.0	1.5	14.7	8	48.04	+ 1.19	.....	+58.83	5 9 48.06
	λ Leporis.....	42.7	56.3	10.1	23.5	37.2	11	9.96	+ 1.26	.....	+58.84	5 12 10.06
	Vesta.....	43.6	58.0	12.8	27.5	42.1	4	12.80	+ 0.90	.....	+58.93	6 5 12.63
	7 Monocerotis.....	31.7	45.1	58.4	11.8	25.3	40	58.46	+ 1.21	.....	+58.94	6 11 58.61
	A. S. C. 793.....	24.2	37.5	50.7	4.1	17.3	13	50.76	+ 1.09	.....	+58.94	6 14 50.79
	77 Orionis.....	32.5	45.6	58.8	12.2	25.4	17	58.90	+ 1.13	.....	+58.95	6 18 58.98
	12 Monocerotis.....	21.3	34.4	47.7	1.0	14.5	22	47.78	+ 1.08	.....	+58.95	6 23 47.81
	δ Ursæ Min. S. P....	28.5	11.5	.....	.....	18.5	22	53.80	+ 7.90	.....	+58.95	6 24 0.65
	14 Monocerotis.....	37.7	51.0	4.5	17.8	31.2	25	4.44	+ 1.05	.....	+58.96	6 26 4.45
	α Canis Majoris.....	36.4	50.3	4.2	18.0	31.8	37	4.14	+ 1.28	58.85	+58.97	6 38 4.39
	20 Monocerotis.....	48.4	1.5	14.8	28.3	41.5	1	14.90	+ 1.17	.....	+59.01	7 2 15.08
	65 Aurigæ.....	45.6	2.2	18.8	35.4	52.2	10	18.84	+ 0.77	.....	+59.03	7 11 18.64
	1 Canis Minoris.....	35.5	49.2	3.0	16.5	30.0	15	2.84	+ 1.02	.....	+59.03	7 16 2.89
	γ Canis Minoris.....	58.3	11.5	25.1	38.7	52.1	18	25.14	+ 1.04	.....	+59.04	7 19 25.22
	δ ¹ Canis Minoris.....	18.8	32.1	45.5	58.8	12.2	22	45.48	+ 1.11	.....	+59.04	7 23 45.63
	δ ³ Canis Minoris.....	23.8	37.0	50.4	3.7	16.8	24	50.34	+ 1.09	.....	+59.05	7 25 50.48
	δ Leonis.....	6.0	20.2	34.4	48.6	2.8	4	34.40	+ 0.94	59.16	+59.37	11 5 34.71
	Groomb. 4101 S. P....	2.0	34.5	8.0	41.0	14.0	26	7.90	+ 7.58	.....	+59.40	11 27 14.88
	Mars 1 Limb.....	3.2	.....	29.8	.....	56.6	35	29.87	+ 1.07	.....	+59.41	11 36 30.35

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instrument.	Correction of Clock		Apparent Right Ascension observed.			
		I.	II.	III.	IV.	V.				observed.	interpolated.				
		s.	s.	s.	s.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Mar. 9	Mars 2 Limb .....	.....	17.9	.....	44.5	.....	35	31.20	+ 1.07	.....	+ 59.41	11	36	31.68
Mar. 12	(a) Sun 1 Limb.....	18.4	31.8	45.1	58.4	11.8	26	45.10	+ 1.48	.....	+ 4.74	23	26	51.32
	Sun 2 Limb.....	27.7	41.2	54.5	7.9	21.2	28	54.50	+ 1.48	.....	+ 4.74	23	29	0.72
	α Aurigæ.....	4.7	23.8	43.0	2.0	20.8	4	42.86	+ 0.76	+ 5.45	+ 5.24	5	4	48.86	
	β Orionis.....	15.1	28.5	41.8	55.3	8.7	6	41.88	+ 1.54	5.33	+ 5.24	5	6	48.66	
	β Tauri.....	31.2	46.4	1.5	16.5	31.6	16	1.44	+ 1.07	5.36	+ 5.25	5	16	7.76	
	1 Lynceis.....	4.4	31.8	0.0	28.1	56.0	3	0.06	+ 0.25	.....	+ 5.32	6	3	5.63
	Vesta.....	38.8	53.5	8.3	23.0	37.7	7	8.26	+ 1.11	.....	+ 5.33	6	7	14.70
	7 Monocerotis.....	25.0	38.4	51.7	5.2	18.5	11	51.76	+ 1.53	.....	+ 5.34	6	11	58.63
	A. S. C. 793.....	17.5	30.7	44.0	57.4	10.8	14	44.08	+ 1.38	.....	+ 5.34	6	14	50.80
	77 Orionis.....	25.6	38.8	52.2	5.4	18.7	18	52.14	+ 1.42	.....	+ 5.35	6	18	58.91
	δ Ursæ Min. S. P.	20.0	4.0	47.0	30.0	14.0	23	47.00	+ 11.38	+ 5.36
	ν^2 Canis Majoris.....	5.7	19.7	33.8	48.0	2.0	29	33.84	+ 1.68	.....	+ 5.36	6	29	40.88
	42 Camelopardi.....	55.2	30.3	5.3	40.5	15.7	34	5.40	- 0.12	.....	+ 5.37	6	34	10.65
	16 Monocerotis.....	13.4	26.6	40.1	53.6	6.8	37	40.10	+ 1.32	.....	+ 5.38	6	37	46.80
	18 Monocerotis.....	55.8	9.1	22.4	35.6	49.1	39	22.40	+ 1.32	.....	+ 5.38	6	39	29.10
	θ Canis Majoris.....	9.7	23.2	36.8	50.4	4.0	46	36.82	+ 1.58	.....	+ 5.39	6	46	43.79
	ι Canis Majoris.....	23.8	37.8	51.6	5.5	19.5	48	51.64	+ 1.64	.....	+ 5.39	6	48	58.67
	19 Monocerotis.....	23.1	36.6	49.8	3.1	16.4	54	49.80	+ 1.48	.....	+ 5.40	6	54	56.68
	65 Aurigæ.....	38.8	55.7	12.5	28.7	45.7	11	12.28	+ 0.93	.....	+ 5.43	7	11	18.64
	1 Canis Minoris.....	29.1	42.6	56.2	9.7	23.4	15	56.20	+ 1.28	.....	+ 5.43	7	16	2.91
	δ^1 Canis Minoris.....	12.0	25.5	38.8	52.1	5.4	23	38.76	+ 1.41	.....	+ 5.45	7	23	45.62
	δ^3 Canis Minoris.....	16.7	30.2	43.5	57.0	10.4	25	43.56	+ 1.38	.....	+ 5.45	7	25	50.39
	Groombridge 1418.....	33.0	27.0	20.0	13.5	8.0	8	20.30	- 6.47	.....	+ 5.51	8	8	19.34
	6 Hydræ.....	51.4	4.7	18.3	32.0	45.6	32	18.40	+ 1.58	.....	+ 5.55	8	32	25.53
	14 Hydræ.....	44.4	57.5	11.0	24.1	37.5	41	10.90	+ 1.47	.....	+ 5.56	8	41	17.93
	Groomb. 3402 S. P.	15.0	31.0	41.0	.....	7.0	43	41.65	+ 26.33	.....	+ 5.56	8	44	13.54
	ϵ Leonis.....	8.8	23.2	37.6	52.2	6.7	36	37.70	+ 1.12	5.40	+ 5.64	9	36	44.46	
	α Leonis.....	15.5	29.1	42.6	56.2	10.0	59	42.68	+ 1.27	5.53	+ 5.68	9	59	49.63	
	Groombridge 1620.....	.....	53.5	28.5	2.0	37.0	5	28.08	- 5.62	.....	+ 5.69	10	5	28.15
	μ Ursæ Majoris.....	3.4	21.1	39.3	57.3	15.1	12	39.24	+ 0.83	.....	+ 5.70	10	12	45.77
A. S. C. 1245.....	2.5	15.7	29.1	42.5	55.6	20	29.08	+ 1.47	.....	+ 5.71	10	20	36.26	
44 Leonis Minoris.....	27.5	42.7	58.0	12.6	28.2	40	57.80	+ 1.06	.....	+ 5.74	10	41	4.60	
67 Leonis.....	36.2	51.0	5.8	20.5	35.4	0	5.78	+ 1.10	.....	+ 5.77	11	0	12.65	
Groomb. 4101 S. P.	54.0	26.5	0.5	32.5	7.0	27	0.10	+ 10.92	.....	+ 5.81	11	27	16.83	
Mars 1 Limb .....	.....	45.7	.....	12.6	.....	31	59.15	+ 1.34	.....	+ 5.82	11	32	6.31	
Mars 2 Limb	33.7	.....	0.3	.....	27.1	32	0.37	+ 1.34	.....	+ 5.82	11	32	7.53	
Mar. 13	Sun 1 Limb.....	56.4	9.8	23.2	36.5	49.8	30	23.14	+ 1.47	.....	+ 6.89	23	30	31.50
	Sun 2 Limb.....	5.3	18.8	32.4	45.8	59.0	32	32.26	+ 1.47	.....	+ 6.89	23	32	40.62
Mar. 15	INSTRUMENT REVERSED.														
Mar. 18	μ Geminorum.....	26.7	41.1	55.5	9.8	24.3	12	55.48	+ 0.54	+ 18.19	+ 18.29	6	13	14.31	
	δ Ursæ Min. S. P.	12.5	55.5	.....	.....	.....	23	38.35	+ 8.53	.....	+ 18.31	6	24	5.19
	β Geminorum.....	39.6	54.8	9.8	25.1	40.2	35	9.90	+ 0.49	18.51	+ 18.41	7	35	28.80	
	9 Argûs.....	33.8	47.4	1.0	14.6	28.1	44	0.98	+ 0.75	.....	+ 18.43	7	44	20.16
	29 Monocerotis.....	45.6	59.0	12.2	25.5	39.0	0	12.26	+ 0.69	.....	+ 18.45	8	0	31.40
	Groombridge 1418.....	18.0	12.0	5.5	59.0	52.0	8	5.30	- 5.16	.....	+ 18.46	8	8	18.60
	2 Hydræ.....	40.2	53.4	6.7	20.1	33.5	18	6.78	+ 0.70	.....	+ 18.47	8	18	25.95
	A. S. C. 1044 preced.	32.8	.....	59.7	.....	26.5	26	59.67	+ 0.63	.....	+ 18.49	8	27	18.79
	A. S. C. 1044 follow.	.....	46.4	.....	13.4	.....	26	59.90	+ 0.63	.....	+ 18.49	8	27	19.02
	δ Hydræ.....	23.4	36.7	50.2	3.6	17.0	28	50.18	+ 0.64	.....	+ 18.49	8	29	9.31
	6 Hydræ.....	38.8	52.5	6.0	19.6	33.2	32	6.02	+ 0.75	.....	+ 18.49	8	32	25.26
	ι Caneri.....	9.1	24.2	39.4	54.8	10.2	36	39.54	+ 0.48	.....	+ 18.50	8	36	58.52
	14 Hydræ.....	31.7	45.1	58.4	11.7	25.2	40	58.42	+ 0.69	.....	+ 18.50	8	41	17.61
(a) Clock put forward one minute.															

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.			
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	h.	m.	s.	
Mar. 18	Groomb. 3402 S.P. ...	14.0	27.0	40.0	49.5	3.0	43	38.70	+ 19.98	.....	+ 18.51	8	44	17.19
	A. S. C. 1103.....	25.4	42.7	59.7	16.8	34.0	55	59.72	+ 0.39	.....	+ 18.52	8	56	18.63
	A. S. C. 1117.....	39.2	53.5	7.8	22.1	36.4	4	7.80	+ 0.53	.....	+ 18.54	9	4	26.87
	40 Lyncis.....	25.0	41.1	57.3	13.4	29.6	10	57.28	+ 0.43	.....	+ 18.54	9	11	16.25
	α Hydræ.....	55.8	9.4	22.8	36.2	49.7	19	22.78	+ 0.72	+ 18.62	+ 18.55	9	19	42.05
	τ^1 Hydræ.....	14.4	27.7	41.0	54.3	7.6	20	41.00	+ 0.70	.....	+ 18.56	9	21	0.26
	Groomb. 3548 S.P....	27.5	57.0	25.5	54.0	.....	29	25.45	+ 8.05	.....	+ 18.57	9	29	52.07
	ϵ Hydræ.....	53.6	7.1	20.4	33.5	46.8	31	20.28	+ 0.68	.....	+ 18.57	9	31	39.53
	ϵ Leonis.....	55.7	10.4	25.1	39.7	54.3	36	25.04	+ 0.52	18.62	+ 18.58	9	36	44.14
	22 Leonis.....	57.6	12.4	27.0	41.7	56.4	42	27.02	+ 0.51	.....	+ 18.59	9	42	46.12
	A. S. C. 1199.....	0.3	13.6	27.1	40.7	54.4	54	27.22	+ 0.74	.....	+ 18.60	9	54	46.56
	ν^2 Hydræ.....	32.4	45.7	59.3	13.0	26.5	56	59.38	+ 0.75	.....	+ 18.61	9	57	18.74
	α Leonis.....	3.1	16.6	30.4	44.0	57.4	59	30.30	+ 0.61	18.55	+ 18.61	9	59	49.52
	Groombridge 1620 ...	.....	39.0	13.5	48.0	22.0	5	13.45	- 4.51	.....	+ 18.62	10	5	27.56
	μ Hydræ.....	33.0	46.8	0.7	14.5	28.3	18	0.66	+ 0.77	.....	+ 18.63	10	18	20.06
	A. S. C. 1245.....	50.3	3.6	16.8	30.1	43.5	20	16.86	+ 0.69	.....	+ 18.63	10	20	36.18
	ϕ^3 Hydræ & Crateris..	59.3	12.9	26.8	40.5	54.4	30	26.78	+ 0.77	.....	+ 18.65	10	30	46.20
	3 Hydræ & Crateris..	13.7	27.4	41.4	55.3	9.3	38	41.42	+ 0.77	.....	+ 18.66	10	39	0.85
	ν Hydræ & Crateris..	56.0	9.7	23.4	37.1	51.1	41	23.46	+ 0.77	.....	+ 18.66	10	41	42.89
	6 Hydræ & Crateris..	51.4	5.5	19.5	33.6	47.7	45	19.54	+ 0.78	.....	+ 18.66	10	45	38.98
	λ Hydræ & Crateris..	37.6	51.5	5.4	19.4	33.6	15	5.50	+ 0.78	.....	+ 18.70	11	15	24.98
	Mars 1 Limb.....	30.2	.....	56.7	.....	23.6	22	56.83	+ 0.64	.....	+ 18.71	11	23	16.18
	Mars 2 Limb.....	.....	44.5	.....	11.4	.....	22	57.95	+ 0.64	.....	+ 18.71	11	23	17.30
	Groomb. 4101 S.P....	46.0	.....	51.0	23.0	56.5	26	50.92	+ 8.17	.....	+ 18.72	11	27	17.81
	ζ Hydræ & Crateris..	51.0	5.1	18.8	32.6	46.5	36	18.80	+ 0.77	.....	+ 18.73	11	36	38.30
	93 Leonis.....	55.2	9.4	23.4	37.7	51.8	39	23.50	+ 0.54	.....	+ 18.73	11	39	42.77
	η Hydræ & Crateris..	3.7	17.4	31.5	45.2	59.2	47	31.40	+ 0.77	.....	+ 18.74	11	47	50.91
	Groombridge 1850 ...	.....	11.5	48.0	24.5	59.0	56	47.65	- 6.66	.....	+ 18.76	11	56	59.75
	20 Virginis.....	.....	23.1	36.4	50.1	.....	24	36.53	+ 0.61	.....	+ 18.79	12	24	55.93
	.....	9.1	.....	.....	.....	3.4	36.25	+ 0.61	.....	.....	.....	.....	.....	.....
	A. S. C. 91 S.P.	38.0	24.5	10.0	55.5	41.0	47	9.80	+ 6.53	.....	+ 18.82	12	47	35.15
	α Ursæ Min. S. P. ....	.....	3.0	.....	27.0	42.0	0	15.53	+ 17.87	.....	+ 18.84	13	0	52.24
	Jupiter 1 Limb.....	2.9	.....	29.6	.....	56.2	0	29.57	+ 0.71	.....	+ 18.84	13	0	49.12
	Jupiter 2 Limb.....	.....	19.3	.....	45.9	.....	0	32.60	+ 0.71	.....	+ 18.84	13	0	52.15
	Pallas.....	11.7	25.3	38.7	52.3	5.6	20	38.72	+ 0.62	.....	+ 18.86	13	20	58.20
Mar. 19	Sun 1 Limb.....	40.2	53.7	6.8	20.2	33.6	52	6.90	+ 0.74	.....	+ 19.68	23	52	27.32
	Sun 2 Limb.....	49.1	2.5	15.8	29.2	42.4	54	15.80	+ 0.74	.....	+ 19.68	23	54	36.22
	α Andromedæ.....	13.4	28.5	43.6	58.6	13.7	59	43.56	+ 0.52	+ 19.58	+ 19.69	0	0	3.77
	Mercury 1 Limb.....	44.5	57.7	11.1	24.3	37.7	16	11.06	+ 0.72	.....	+ 19.71	0	16	31.49
	α Ursæ Minoris.....	23.5	37.0	50.0	4.0	15.5	0	50.00	- 17.66	.....	+ 19.77	1	0	52.11
	12 Canum Venat.	36.4	53.6	10.8	28.0	45.0	48	10.76	+ 0.40	20.77	+ 20.73	12	48	31.89
	α Ursæ Min. S. P.	46.5	59.0	.....	.....	.....	0	11.80	+ 19.40	.....	+ 20.74	13	0	51.94
Mar. 21	α Aurigæ.....	46.5	5.6	24.6	43.6	2.7	4	24.60	+ 0.26	+ 23.99	+ 24.11	5	4	48.97
	β Orionis.....	56.8	10.4	23.7	37.2	50.6	6	23.74	+ 0.65	24.21	+ 24.11	5	6	48.50
	β Tauri.....	12.9	28.1	43.2	58.3	13.5	15	43.20	+ 0.45	24.06	+ 24.12	5	16	7.77
	δ Orionis.....	56.3	9.5	22.7	35.9	49.3	23	22.74	+ 0.62	24.19	+ 24.13	5	23	47.49
	ϵ Orionis.....	12.0	25.2	38.6	51.8	5.2	27	38.56	+ 0.63	24.14	+ 24.14	5	28	3.33
	Moon 1 Limb.....	15.7	31.2	46.6	2.2	17.9	32	46.72	+ 0.47	.....	+ 24.14	5	33	11.33
	ν Aurigæ.....	22.2	39.3	56.4	13.6	30.8	39	56.46	+ 0.35	.....	+ 24.15	5	40	20.96
	136 Tauri.....	18.8	33.8	48.7	3.6	18.6	42	48.70	+ 0.46	.....	+ 24.16	5	43	13.32
	α Aurigæ.....	12.8	28.2	43.5	58.8	13.9	4	43.44	+ 0.44	.....	+ 24.19	6	5	8.07
	δ Ursæ Min. S. P.	8.0	51.0	34.5	17.0	0.0	23	34.10	+ 7.96	.....	+ 24.21	6	24	6.27
	Groombridge 1418....	10.5	4.0	57.0	51.0	44.0	7	57.30	- 4.83	.....	+ 24.34	8	8	16.81
	1 Hydræ.....	43.2	56.4	9.6	22.8	36.2	16	9.64	+ 0.63	.....	+ 24.35	8	16	34.62
	2 Hydræ.....	34.0	47.3	0.5	14.0	27.3	18	0.62	+ 0.64	.....	+ 24.35	8	18	25.61
	A. S. C. 1044 preced.	.....	40.3	.....	6.9	.....	26	53.60	+ 0.58	.....	+ 24.37	8	27	18.55

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Mar. 21	A. S. C. 1044 follow.	27.2	.....	53.8	.....	20.6	26	53.87	+ 0.58	.....	+ 24.37	h. m. s. 8 27 18.82
	δ Hydræ.....	17.4	30.7	44.1	57.6	10.8	28	44.12	+ 0.58	.....	+ 24.37	8 29 9.07
	6 Hydræ.....	32.8	46.4	59.8	13.5	27.2	31	59.94	+ 0.68	.....	+ 24.37	8 32 24.99
	14 Hydræ.....	25.8	39.2	52.5	5.7	19.1	40	52.46	+ 0.63	.....	+ 24.38	8 41 17.47
	Groomb. 3402 S. P. ...	10.5	26.0	39.0	48.5	1.0	43	37.00	+ 18.67	.....	+ 24.39	8 44 20.06
	A. S. C. 1103	19.4	36.2	53.2	10.8	27.6	55	53.44	+ 0.35	.....	+ 24.40	8 56 18.19
	A. S. C. 1117	33.1	47.5	1.8	16.1	30.5	4	1.80	+ 0.49	.....	+ 24.41	9 4 26.70
	40 Lyncis.....	18.5	34.8	51.1	7.5	23.6	10	51.10	+ 0.39	.....	+ 24.42	9 11 15.91
	τ ¹ Hydræ.....	8.5	21.7	35.0	48.2	1.4	20	34.96	+ 0.64	.....	+ 24.43	9 21 0.03
	Groomb. 3548 S. P. ...	23.0	52.0	21.0	49.5	18.0	29	20.70	+ 7.52	.....	+ 24.44	9 29 52.66
	ι Hydræ	47.7	1.2	14.5	27.7	41.1	31	14.44	+ 0.62	.....	+ 24.45	9 31 39.51
	22 Leonis.....	51.6	6.3	20.8	35.7	50.4	42	20.96	+ 0.47	.....	+ 24.46	9 42 45.89
	υ ² Hydræ.....	26.4	39.9	53.4	7.2	20.6	56	53.50	+ 0.68	.....	+ 24.48	9 57 18.66
	Groombridge 1620 ...	57.0	32.0	7.0	41.0	15.0	5	6.40	- 4.22	.....	+ 24.49	10 5 26.67
	μ Hydræ.....	27.4	41.0	54.8	8.6	22.4	17	54.84	+ 0.70	.....	+ 24.50	10 18 20.04
	φ ³ Hydræ & Crateris	53.3	7.1	20.8	34.6	48.3	30	20.82	+ 0.70	.....	+ 24.52	10 30 46.04
	3 Hydræ & Crateris...	7.8	21.6	35.3	49.3	3.3	38	35.46	+ 0.70	.....	+ 24.53	10 39 0.69
	ν Hydræ & Crateris...	50.0	3.7	17.5	31.2	45.1	41	17.50	+ 0.70	.....	+ 24.54	10 41 42.74
	λ Hydræ & Crateris...	31.6	45.7	59.7	13.5	27.7	14	59.64	+ 0.71	.....	+ 24.58	11 15 24.93
	Mars 1 Limb .....	.....	20.6	.....	47.4	.....	18	34.00	+ 0.58	.....	+ 24.58	11 18 59.16
	Mars 2 Limb	8.3	.....	35.1	.....	1.8	18	35.07	+ 0.58	.....	+ 24.58	11 19 0.23
	86 Leonis.....	13.5	27.5	41.6	55.6	9.7	21	41.58	+ 0.51	.....	+ 24.59	11 22 6.68
	ϑ Hydræ & Crateris...	40.7	54.1	7.6	21.1	34.5	28	7.60	+ 0.66	.....	+ 24.60	11 28 32.86
	24 Hydræ & Crateris...	39.1	52.6	6.2	19.8	33.4	30	6.22	+ 0.68	.....	+ 24.60	11 30 31.50
	93 Leonis.....	48.9	.....	.....	.....	45.8	39	17.35	+ 0.49	.....	+ 24.61	11 39 42.45
	.....	.....	3.0	17.1	31.4	.....	.....	17.17	+ 0.49	.....	.....	.....
	η Hydræ & Crateris...	57.7	11.7	25.6	39.4	53.3	47	25.54	+ 0.70	.....	+ 24.62	11 47 50.86
	Groombridge 1850 ...	27.0	4.5	41.0	17.5	54.0	56	40.80	- 6.23	.....	+ 24.64	11 56 59.21
	Groombridge 1884 ...	33.5	35.5	35.5	33.5	35.0	15	34.60	- 16.75	.....	+ 24.66	12 15 42.51
	Groomb. 144 S. P. ...	8.0	2.0	55.5	48.0	43.5	40	55.40	+ 14.11	.....	+ 24.69	12 41 34.20
	A. S. C. 91 S. P.	33.0	19.0	4.5	50.0	35.0	47	4.30	+ 6.09	.....	+ 24.70	12 47 35.09
	Jupiter 1 Limb.....	.....	51.9	.....	18.6	.....	59	5.25	+ 0.64	.....	+ 24.71	12 59 30.60
	Jupiter 2 Limb.....	41.6	.....	8.4	.....	35.1	59	8.37	+ 0.64	.....	+ 24.71	12 59 33.72
	α Ursæ Min. S. P.	43.5	57.0	12.0	22.5	35.0	0	10.00	+ 16.70	.....	+ 24.71	13 0 51.41
	Pallas	18.0	31.4	45.0	58.5	12.2	18	45.02	+ 0.55	.....	+ 24.73	13 19 10.30
	Groombridge 2007 ...	44.0	.....	30.0	23.0	15.5	21	29.92	- 4.82	.....	+ 24.74	13 21 49.84
	Ceres	28.5	41.8	55.2	8.6	22.1	35	55.24	+ 0.58	.....	+ 24.76	13 36 20.58
Mar. 22	Sun 1 Limb.....	29.6	43.0	56.2	9.6	22.9	2	56.26	+ 0.74	.....	+ 25.56	0 3 22.56
	Sun 2 Limb.....	38.8	51.8	5.1	18.2	31.5	5	5.08	+ 0.74	.....	+ 25.56	0 5 31.38
	α Ursæ Minoris	18.5	31.5	43.0	56.0	10.0	0	43.80	- 18.39	.....	+ 25.63	1 0 51.04
	Venus 1 Limb.....	46.3	59.8	.....	.....	40.4	28	13.33	+ 0.68	.....	+ 25.66	1 28 39.67
	α Arietis.....	11.2	25.5	39.8	51.2	8.6	57	39.86	+ 0.57	+ 25.63	+ 25.69	1 58 6.12
	η Tauri	0.2	14.7	29.3	43.6	58.0	37	29.16	+ 0.56	25.69	+ 25.83	3 37 55.55
	α Orionis	34.7	48.1	1.5	14.8	28.3	46	1.48	+ 0.68	25.94	+ 25.99	5 46 28.15
	α Aurigæ	11.0	26.4	41.5	56.7	12.1	4	41.54	+ 0.51	.....	+ 26.02	6 5 8.07
	μ Geminorum.....	18.4	33.0	47.5	2.0	16.5	12	47.48	+ 0.57	26.09	+ 26.03	6 13 14.08
	δ Ursæ Min. S. P.	6.5	49.0	32.0	14.5	57.5	23	31.90	+ 9.59	.....	+ 26.04	6 24 7.53
	Moon 1 Limb.....	49.4	4.8	20.4	36.0	51.4	36	20.40	+ 0.55	.....	+ 26.06	6 36 47.01
	18 Monocerotis.....	35.5	48.7	2.2	15.5	28.7	39	2.12	+ 0.73	.....	+ 26.06	6 39 28.91
	ι Canis Majoris.....	3.6	17.5	31.4	45.3	59.2	48	31.40	+ 0.85	.....	+ 26.07	6 48 58.32
	22 Monocerotis.....	46.2	59.4	12.6	25.9	39.3	3	12.68	+ 0.74	.....	+ 26.09	7 3 39.51
	δ Geminorum	36.0	50.4	4.7	19.1	33.5	10	4.74	+ 0.57	26.18	+ 26.10	7 10 31.41
	1 Canis Minoris	8.7	22.1	35.7	49.3	2.8	15	35.72	+ 0.65	.....	+ 26.11	7 16 2.48
	γ Canis Minoris	31.1	44.5	57.8	11.4	24.8	18	57.92	+ 0.68	.....	+ 26.11	7 19 24.71
	α Geminorum preced.	21.9	.....	53.5	.....	25.0	23	53.47	+ 0.47	{ 26.22 }	+ 26.12	7 24 20.06
	α Geminorum follow.	.....	38.3	.....	9.7	.....	23	54.00	+ 0.47		+ 26.12	7 24 20.59
	ι Cancri.....	1.3	16.5	31.7	46.8	2.2	36	31.70	+ 0.51	.....	+ 26.21	8 36 58.42

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Mar. 22	ε Hydræ	2.1	15.5	28.8	42.2	55.6	39	28.84	+ 0.69	.....	+ 26.21	8 39 55.74
Mar. 23	Mercury 1 Limb.....	2.5	15.8	29.2	42.6	55.8	44	29.18	+ 0.68	.....	+ 27.44	0 44 57.30
	α Ursæ Minoris .....	.....	29.0	42.0	54.0	7.5	0	41.85	- 17.68	.....	+ 27.46	1 0 51.63
	Venus 1 Limb.....	19.0	32.4	45.9	59.5	12.9	32	45.94	+ 0.65	.....	+ 27.51	1 33 14.10
	η Tauri.....	58.3	12.7	27.3	41.7	56.3	37	27.26	+ 0.54	+ 27.60	+ 27.66	3 37 55.46
	β Tauri.....	9.5	24.6	39.5	54.6	9.7	15	39.58	+ 0.50	27.59	+ 27.79	5 16 7.87
	δ Orionis	52.5	5.8	19.0	32.3	45.7	23	19.06	+ 0.71	27.74	+ 27.80	5 23 47.57
	ε Orionis	8.2	21.5	34.8	48.1	1.4	27	34.80	+ 0.72	27.77	+ 27.81	5 28 3.33
	δ Ursæ Min. S. P.	6.0	48.5	.....	.....	.....	23	31.60	+ 0.23	.....	+ 27.87	6 24 8.70
	δ Geminorum	33.8	48.4	2.7	16.8	31.2	10	2.58	+ 0.55	28.32	+ 27.92	7 10 31.05
	ε Canis Minoris	56.3	9.8	23.2	36.7	50.2	16	23.24	+ 0.65	.....	+ 27.93	7 16 51.82
	γ Canis Minoris	29.3	42.6	56.2	9.5	23.0	18	56.12	+ 0.65	.....	+ 27.93	7 19 24.70
	α Geminorum follow.	20.7	.....	52.2	.....	.....	23	52.16	+ 0.45	.....	+ 27.94	7 24 20.55
	Moon 1 Limb	14.2	29.5	44.7	0.0	15.2	36	44.72	+ 0.54	.....	+ 27.95	7 37 13.21
	6 Argûs	29.0	43.1	57.1	11.0	24.7	41	56.98	+ 0.81	.....	+ 27.96	7 42 25.75
	9 Argûs	23.7	37.5	51.3	4.8	18.4	43	51.14	+ 0.79	.....	+ 27.96	7 44 19.89
	A. S. C. 968	52.1	5.6	19.1	32.5	46.0	46	19.06	+ 0.65	.....	+ 27.96	7 46 47.67
	6 Cancri	40.2	55.3	10.4	25.3	40.5	53	10.34	+ 0.50	.....	+ 27.97	7 53 38.81
	29 Monocerotis	35.9	49.2	2.5	15.7	29.2	0	2.50	+ 0.72	.....	+ 27.98	8 0 31.20
	β Cancri	52.5	6.1	19.5	32.8	46.3	7	19.44	+ 0.64	.....	+ 27.99	8 7 48.07
	1 Hydræ	39.2	52.4	5.8	19.2	32.5	16	5.82	+ 0.73	.....	+ 28.00	8 16 34.55
	2 Hydræ	30.4	43.6	56.8	10.2	23.5	17	56.90	+ 0.73	.....	+ 28.00	8 18 25.63
	θ Cancri	29.4	43.4	57.4	11.4	25.4	21	57.40	+ 0.58	.....	+ 28.00	8 22 25.98
	δ Hydræ	13.6	27.0	40.4	53.6	7.1	28	40.34	+ 0.67	.....	+ 28.01	8 29 9.02
	ε ² Cancri	2.6	17.6	32.8	48.1	3.4	42	32.90	+ 0.49	.....	+ 28.02	8 43 1.41
	ζ Hydræ	58.7	12.0	25.4	38.8	52.3	46	25.44	+ 0.66	.....	+ 28.03	8 46 54.13
	A. S. C. 1103	15.5	32.6	49.8	6.8	24.0	55	49.74	+ 0.38	.....	+ 28.04	8 56 18.16
	A. S. C. 1117	29.4	43.8	58.1	12.4	26.7	3	58.08	+ 0.55	.....	+ 28.04	9 4 26.67
	23 Hydræ	48.0	1.3	14.6	28.0	41.5	8	14.68	+ 0.75	.....	+ 28.05	9 8 43.48
	τ ¹ Hydræ	4.7	17.9	31.1	44.4	57.8	20	31.18	+ 0.73	.....	+ 28.06	9 20 59.97
	Groomb. 3548 S. P. ...	20.0	49.0	18.0	46.5	16.0	29	17.90	+ 8.71	.....	+ 28.07	9 29 54.68
	A. S. C. 1245	40.5	54.1	7.2	20.6	33.8	20	7.24	+ 0.72	.....	+ 28.13	10 20 36.09
	φ ³ Hydræ & Crateris	49.5	3.3	17.2	31.2	44.8	30	17.20	+ 0.81	.....	+ 28.15	10 30 46.16
	33 Sextantis .....	.....	32.4	45.6	59.0	.....	32	45.67	+ 0.72	.....	+ 28.15	10 33 14.54
	.....	18.7	.....	.....	.....	12.0	.....	45.35	+ 0.72	.....	.....	.....†
	Mars 1 Limb	18.0	.....	45.0	.....	11.9	15	44.97	+ 0.65	.....	+ 28.20	11 16 13.82
	Mars 2 Limb .....	.....	32.5	.....	59.5	.....	15	46.00	+ 0.65	.....	+ 28.20	11 16 14.85
	86 Leonis	9.7	23.8	37.9	52.0	6.2	21	37.92	+ 0.58	.....	+ 28.20	11 22 6.70
	θ Hydræ & Crateris ...	37.1	50.4	3.8	17.4	30.7	28	3.88	+ 0.60	.....	+ 28.21	11 28 32.69
	η Hydræ & Crateris ...	54.4	8.2	21.8	35.6	49.5	47	21.90	+ 0.82	.....	+ 28.24	11 47 50.96
Mar. 24	α Canis Minoris	56.5	9.7	23.2	36.4	49.7	30	23.10	+ 0.64	+ 29.65	+ 29.58	7 30 53.32
	6 Cancri	38.5	53.6	8.8	23.7	39.9	53	8.90	+ 0.48	.....	+ 29.61	7 53 38.99
	Moon 1 Limb	24.1	38.7	53.5	8.2	23.1	32	53.52	+ 0.53	.....	+ 29.65	8 33 23.70
	ε ⁴ Cancri	1.5	16.7	32.0	47.1	2.2	45	31.90	+ 0.48	.....	+ 29.67	8 46 2.05
	ξ Cancri	8.2	22.7	37.2	51.6	6.1	59	37.16	+ 0.53	.....	+ 29.69	9 0 7.38
	π ² Cancri	23.7	37.7	51.5	5.4	19.2	5	51.50	+ 0.58	.....	+ 29.70	9 6 21.78
	83 Cancri	2.8	16.8	30.7	44.7	58.8	9	30.76	+ 0.56	.....	+ 29.70	9 10 1.02
	A. S. C. 1141	44.4	58.5	12.7	26.8	40.9	15	12.66	+ 0.54	.....	+ 29.71	9 15 42.91
	α Hydræ	44.7	58.2	11.6	25.2	38.8	19	11.70	+ 0.73	29.61	+ 29.71	9 19 42.14
Mar. 25	Sun 1 Limb	18.7	31.9	45.2	58.6	11.8	13	45.24	+ 0.64	.....	+ 30.84	0 14 16.72
	Sun 2 Limb	27.3	40.6	54.1	7.5	20.9	15	54.08	+ 0.61	.....	+ 30.81	0 16 25.56
	α Ursæ Minoris	11.0	24.0	36.5	49.0	3.0	0	36.70	- 16.63	.....	+ 30.89	1 0 50.96
	Venus 1 Limb	26.2	39.8	53.3	6.7	20.5	41	53.30	+ 0.59	.....	+ 30.91	1 42 24.83
	α Arietis	5.8	20.4	34.8	49.2	3.5	57	34.74	+ 0.50	+ 30.81	+ 30.97	1 58 6.21
	α Orionis	29.4	42.7	56.2	9.5	23.0	45	56.16	+ 0.61	31.28	+ 31.25	5 46 28.02

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpo- lated.			
Mar. 25	μ Geminorum	13.6	27.9	42.2	56.7	11.2	12	42.32	+ 0.50	+ 31.27	+ 31.29	6 13	14.11	
	δ Ursæ Min. S. P.	44.0	28.0	11.0	53.5	23	27.68	+ 8.66	.....	+ 31.30	+ 31.30	6 24	7.64	
	α Canis Majoris	4.3	18.1	31.8	45.7	59.6	37	31.90	+ 0.75	31.34	+ 31.32	6 38	3.97	
	29 Monocerotis	32.2	45.6	58.8	12.3	25.5	59	58.88	+ 0.67	.....	+ 31.42	8 0	30.97	
	β Cancri	48.8	2.4	15.8	29.5	42.8	7	15.86	+ 0.59	.....	+ 31.43	8 7	47.88	
	22 Argûs	14.2	28.0	41.6	55.3	8.8	14	41.58	+ 0.73	.....	+ 31.44	8 15	13.75	
	A. S. C. 1041	17.5	31.7	45.9	59.8	14.0	23	45.78	+ 0.76	.....	+ 31.45	8 24	17.99	
	9 Hydræ	16.5	30.4	44.1	57.7	11.7	33	44.08	+ 0.74	.....	+ 31.46	8 34	16.28	
	ϵ Hydræ	17.2	30.6	44.1	57.5	10.8	37	44.04	+ 0.61	31.62	+ 31.47	8 38	16.12	
	ζ Hydræ	55.4	.....	.....	.....	48.7	46	22.05	+ 0.61	.....	+ 31.48	8 46	54.14	
	.....	.....	8.4	21.8	35.1	.....	.....	21.77	+ 0.61	.....	.....	.....	.....	†
	A. S. C. 1099	27.4	47.2	7.0	26.7	46.5	52	6.96	+ 0.22	.....	+ 31.49	8 52	38.67	
	ω Hydræ	32.4	45.5	58.8	12.2	25.6	56	58.90	+ 0.62	.....	+ 31.50	8 57	31.02	
	ξ Cancri	6.4	21.0	35.4	49.7	4.2	59	35.34	+ 0.50	.....	+ 31.50	9 0	7.34	
	83 Cancri	0.8	15.2	29.0	42.5	57.1	9	28.92	+ 0.53	.....	+ 31.51	9 10	0.96	
	Moon 1 Limb	12.3	26.5	40.8	55.1	9.6	24	40.86	+ 0.54	.....	+ 31.53	9 25	12.93	
	ι Hydræ	40.5	54.2	7.4	20.7	34.0	31	7.36	+ 0.65	.....	+ 31.54	9 31	39.55	
	22 Leonis	44.6	59.4	14.1	28.6	43.4	42	14.02	+ 0.48	.....	+ 31.56	9 42	46.06	
	ν Leonis	35.7	49.4	3.2	16.7	30.3	49	3.06	+ 0.56	.....	+ 31.57	9 49	35.19	
	η Leonis	34.6	48.6	2.5	16.5	30.4	58	2.52	+ 0.53	.....	+ 31.58	9 58	34.63	
	λ^2 Hydræ	46.6	0.1	13.8	27.3	40.6	2	13.68	+ 0.73	.....	+ 31.58	10 2	45.99	
	μ Hydræ	20.0	33.5	47.4	1.4	15.2	17	47.50	+ 0.74	.....	+ 31.60	10 18	19.84	
	1 Hydræ & Crateris...	26.7	40.6	54.4	8.2	22.1	27	54.40	+ 0.74	.....	+ 31.61	10 28	26.75	
	3 Hydræ & Crateris...	0.6	14.5	28.3	42.0	56.2	38	28.32	+ 0.75	.....	+ 31.62	10 39	0.69	
	6 Hydræ & Crateris...	38.5	52.5	6.5	20.5	34.6	45	6.52	+ 0.76	.....	+ 31.63	10 45	38.91	
	α Hydræ & Crateris...	57.5	11.4	25.5	39.4	53.3	51	25.42	+ 0.75	.....	+ 31.64	10 51	57.81	
	Mars 1 Limb	48.9	.....	.....	15.5	.....	13	2.20	+ 0.60	.....	+ 31.66	11 13	34.46	
	Mars 2 Limb	36.6	.....	3.4	.....	30.2	13	3.40	+ 0.60	.....	+ 31.66	11 13	35.66	
	λ Hydræ & Crateris...	24.4	38.7	52.6	6.5	20.5	14	52.54	+ 0.75	.....	+ 31.67	11 15	24.96	
	θ Hydræ & Crateris...	33.6	47.2	0.4	14.0	27.4	28	0.52	+ 0.71	.....	+ 31.68	11 28	32.91	
	ζ Hydræ & Crateris...	38.1	52.0	5.8	19.8	33.7	36	5.88	+ 0.75	.....	+ 31.69	11 36	38.32	
	Groombridge 1850 ...	22.0	59.5	34.0	11.0	46.0	56	34.50	- 6.85	.....	+ 31.72	11 56	59.37	
	Groombridge 1884 ...	26.5	26.0	26.0	25.5	30.0	15	26.80	- 18.35	.....	+ 31.74	12 15	40.19	
	Groomb. 144 S. P. ...	0.5	55.0	47.0	41.0	33.5	40	47.40	+ 15.39	.....	+ 31.77	12 41	34.56	
	A. S. C. 91 S. P.	25.5	11.0	57.0	41.5	26.5	46	56.30	+ 6.62	.....	+ 31.78	12 47	34.70	
	Jupiter 1 Limb .....	.....	56.7	.....	23.4	.....	57	10.05	+ 0.68	.....	+ 31.80	12 57	42.53	
	Jupiter 2 Limb	46.3	.....	13.1	.....	39.6	57	13.00	+ 0.68	.....	+ 31.80	12 57	45.48	
	α Ursæ Min. S. P.	37.5	48.5	0.0	13.5	.....	0	1.15	+ 18.21	.....	+ 31.80	13 0	51.16	
	Pallas	33.8	47.4	1.2	14.5	28.1	16	1.00	+ 0.57	.....	+ 31.82	13 16	33.39	
	Groombridge 2007 ...	.....	30.0	23.5	16.5	9.0	21	23.32	- 5.31	.....	+ 31.83	13 21	49.84	
	Ceres	30.1	43.4	56.7	10.2	23.6	32	56.80	+ 0.61	.....	+ 31.84	13 33	29.25	
Mar. 26	Sun 1 Limb	54.8	8.1	21.4	34.6	48.0	17	21.38	+ 0.64	.....	+ 32.68	0 17	54.70	
	Sun 2 Limb	3.5	16.8	30.0	43.3	56.5	19	30.02	+ 0.64	.....	+ 32.68	0 20	3.34	
Mar. 27	α Ursæ Minoris	8.0	24.0	.....	47.0	59.0	0	34.48	- 18.04	.....	+ 34.58	1 0	51.02	
	Venus 1 Limb	35.7	49.4	3.1	16.6	30.2	51	3.00	+ 0.64	.....	+ 34.65	1 51	38.29	
	α Orionis	25.8	39.4	52.5	5.8	19.3	45	52.56	+ 0.66	+ 34.80	+ 34.95	5 46	28.17	
	A. S. C. 761	17.4	54.9	32.8	10.6	48.0	0	32.74	- 0.51	.....	+ 34.97	6 1	7.20	
	2 Lyncis	59.3	25.4	51.0	16.7	42.6	4	51.00	- 0.03	.....	+ 34.98	6 5	25.95	
	μ Geminorum	9.7	24.3	38.6	52.8	7.3	12	38.54	+ 0.56	34.96	+ 34.99	6 13	14.09	
	δ Ursæ Min. S. P.	59.0	42.0	25.5	8.0	51.0	23	25.10	+ 9.40	.....	+ 35.00	6 24	9.50	
	A. S. C. 1041	14.0	28.0	42.1	56.2	10.3	23	42.12	+ 0.81	.....	+ 35.15	8 24	18.11	
	A. S. C. 1044 preced.	16.0	.....	42.6	.....	9.4	26	42.67	+ 0.67	.....	+ 35.16	8 27	18.50	
	A. S. C. 1041 follow.	.....	29.6	.....	56.4	.....	26	43.00	+ 0.67	.....	+ 35.16	8 27	18.83	
	σ Hydræ	19.3	32.5	45.8	59.1	12.5	29	45.84	+ 0.69	.....	+ 35.16	8 30	21.69	
	ϵ Hydræ	13.4	26.8	40.3	53.6	7.2	37	40.26	+ 0.67	35.31	+ 35.17	8 38	16.10	
	ζ Hydræ	52.8	6.4	19.7	33.0	46.4	39	19.66	+ 0.67	.....	+ 35.17	8 39	55.50	

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instrument.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpolated.	
Mar. 27	γ^2 Cancri	55.4	10.6	25.8	41.1	56.3	42	25.84	+ 0.50	.....	+ 35.18	h. m. s. 8 43 1.52
	A. S. C. 1099	23.5	43.3	3.4	.....	42.5	52	3.12	+ 0.25	.....	+ 35.19	8 52 38.56
	A. S. C. 91 S. P.	22.0	7.0	52.5	37.5	23.0	46	52.40	+ 7.18	.....	+ 35.48	12 47 35.06
	Jupiter 1 Limb	44.4	.....	11.0	.....	37.7	56	11.03	+ 0.75	.....	+ 35.50	12 56 47.28
	Jupiter 2 Limb .....	.....	0.7	.....	27.5	.....	56	14.10	+ 0.75	.....	+ 35.50	12 56 50.35
	α Ursæ Min. S. P.	31.0	43.0	56.0	9.0	.....	59	55.98	+ 19.76	.....	+ 35.50	13 0 51.24
	Pallas	7.3	20.8	34.4	48.2	1.8	14	34.50	+ 0.63	.....	+ 35.52	13 15 10.65
	α Virginis	41.8	55.3	8.6	22.3	35.5	16	8.70	+ 0.78	+ 35.59	+ 35.52	13 16 45.00
Mar. 29	Sun 1 Limb	43.0	56.3	9.5	23.0	36.2	28	9.60	+ 0.58	.....	+ 38.21	0 28 48.39
	1 Lynceis	31.0	58.8	26.7	54.5	22.4	2	26.68	- 0.27	.....	+ 38.63	6 3 5.04
	2 Lynceis	55.6	21.7	47.5	13.4	39.3	4	47.50	- 0.18	.....	+ 38.64	6 5 25.96
	μ Geminorum	6.2	20.5	35.0	49.4	3.8	12	34.98	+ 0.43	+ 38.61	+ 38.65	6 13 14.06
	δ Ursæ Min. S. P.	56.0	38.5	21.0	4.0	47.0	23	21.30	+ 9.63	.....	+ 38.66	6 24 9.59
	42 Camelopardi	21.4	56.8	31.8	6.8	42.0	33	31.76	- 0.57	.....	+ 38.67	6 34 9.86
	α Canis Minoris	47.4	0.8	14.1	27.5	40.8	30	14.12	+ 0.57	38.62	+ 38.75	7 30 53.44
	β Geminorum	19.5	34.5	49.7	4.8	19.8	34	49.66	+ 0.38	38.67	+ 38.75	7 35 28.79
	A. S. C. 1041	10.4	24.4	38.4	52.5	6.5	23	38.44	+ 0.73	.....	+ 38.81	8 24 17.98
	A. S. C. 1044 preced. ....	.....	25.7	.....	52.5	.....	26	39.10	+ 0.56	.....	+ 38.81	8 27 18.47
	A. S. C. 1044 follow.	12.5	.....	39.4	.....	6.4	26	39.43	+ 0.56	.....	+ 38.81	8 27 18.80
	σ Hydræ	15.5	29.0	42.4	55.6	8.8	29	42.26	+ 0.58	.....	+ 38.81	8 30 21.65
	9 Hydræ	9.3	22.8	36.5	50.4	4.3	33	36.66	+ 0.71	.....	+ 38.82	8 34 16.19
	ϵ Hydræ	9.8	23.4	36.7	50.2	3.5	37	36.72	+ 0.56	38.94	+ 38.82	8 38 16.10
	ζ Hydræ	49.4	2.7	16.1	29.4	42.7	39	16.06	+ 0.56	.....	+ 38.83	8 39 55.45
	ζ Hydræ	47.9	1.3	14.7	28.2	41.5	46	14.72	+ 0.56	.....	+ 38.83	8 46 54.11
	ω Hydræ	25.1	38.4	51.6	5.0	18.4	56	51.70	+ 0.57	.....	+ 38.85	8 57 31.12
	20 Hydræ	38.2	51.4	4.8	18.3	31.8	1	4.90	+ 0.66	.....	+ 38.85	9 1 44.41
	21 Hydræ	24.2	37.4	50.7	4.3	17.5	3	50.82	+ 0.66	.....	+ 38.85	9 4 30.33
	27 Hydræ	32.3	45.6	59.3	12.6	25.8	11	59.12	+ 0.67	.....	+ 38.86	9 12 38.65
	α Hydræ	35.5	48.9	2.4	15.8	29.2	19	2.36	+ 0.66	38.99	+ 38.87	9 19 41.89
	A. S. C. 1199	39.5	53.1	6.8	20.4	34.1	54	6.78	+ 0.69	.....	+ 38.91	9 54 46.38
	ν^2 Hydræ	11.7	25.4	39.0	52.4	6.2	56	38.94	+ 0.69	.....	+ 38.92	9 57 18.55
	λ^2 Hydræ	39.1	52.6	6.1	19.8	33.4	2	6.20	+ 0.68	.....	+ 38.92	10 2 45.80
	22 Sextantis	33.0	46.4	59.7	13.3	26.5	8	59.78	+ 0.66	.....	+ 38.93	10 9 39.37
	1 Hydræ & Crateris ...	19.5	33.3	47.2	1.0	14.8	27	47.16	+ 0.71	.....	+ 38.95	10 28 26.82
	40 Leonis Minoris ...	3.5	18.6	33.5	48.5	3.5	33	33.52	+ 0.39	.....	+ 38.95	10 34 12.86
	ν Hydræ & Crateris ...	35.4	49.2	3.1	16.8	30.5	41	3.00	+ 0.71	.....	+ 38.96	10 41 42.67
	55 Leonis	20.7	.....	.....	.....	14.0	46	47.35	+ 0.60	.....	.....	.....†
	.....	.....	34.3	47.6	0.9	.....	.....	47.60	+ 0.60	.....	+ 38.96	10 47 27.16
	α Hydræ & Crateris ...	50.3	4.1	18.0	31.8	45.5	51	17.94	+ 0.72	.....	+ 38.97	10 51 57.63
	Mars 1 Limb	32.0	.....	58.9	.....	26.0	7	58.97	+ 0.54	.....	+ 38.99	11 8 38.50
	Mars 2 Limb .....	.....	46.4	.....	13.2	.....	7	59.80	+ 0.54	.....	+ 38.99	11 8 39.33
	α Hydræ & Crateris ...	58.3	11.6	25.2	38.8	52.4	18	25.26	+ 0.68	.....	+ 39.00	11 19 4.94
	24 Hydræ & Crateris ...	24.6	38.3	51.8	5.4	19.1	29	51.84	+ 0.69	.....	+ 39.01	11 30 31.54
	ζ Hydræ & Crateris ...	30.7	44.5	58.5	12.4	26.4	35	58.50	+ 0.72	.....	+ 39.02	11 36 38.24
	ϕ Virginis	55.7	9.4	22.7	36.3	49.7	56	22.76	+ 0.54	.....	+ 39.05	11 57 2.35
	Groombridge 1850 ...	15.0	52.0	.....	5.0	42.0	56	28.49	- 7.86	.....	+ 39.05	11 56 59.68
	η Virginis	35.8	49.2	2.5	15.8	29.2	11	2.50	+ 0.61	.....	+ 39.06	12 11 42.17
	Groombridge 1884 ...	24.0	25.0	26.0	.....	24.0	15	25.02	- 20.83	.....	+ 39.07	12 15 43.26
	Moon 1 Limb	11.2	25.1	38.7	52.4	6.1	24	38.70	+ 0.67	.....	+ 39.08	12 25 18.45
	(a) Moon 2 Limb	13.2	26.7	40.4	54.0	7.6	26	40.38	+ 0.67	.....	+ 39.08	12 27 20.13
	ψ Virginis	54.5	8.0	21.4	34.7	48.3	45	21.38	+ 0.66	.....	+ 39.10	12 46 1.14
	Jupiter 1 Limb .....	.....	58.1	.....	25.0	.....	55	11.55	+ 0.64	.....	+ 39.11	12 55 51.30
	Jupiter 2 Limb	47.8	.....	14.5	.....	41.3	55	14.53	+ 0.64	.....	+ 39.11	12 55 54.28
	α Ursæ Min. S. P.	25.0	37.5	.....	5.0	13.5	59	50.27	+ 20.39	.....	+ 39.12	13 0 49.78
	θ Virginis	32.7	46.0	59.4	12.6	26.0	0	59.34	+ 0.65	.....	+ 39.12	13 1 39.11
	Pallas	38.4	52.2	5.6	19.4	33.1	13	5.74	+ 0.51	.....	+ 39.13	13 13 45.38
	Groombridge 2007 ...	31.5	24.0	17.5	11.0	2.5	21	17.30	- 6.13	.....	+ 39.14	13 21 50.31

(a) 0^s.01 to be added to Apparent Right Ascension observed for defect of illuminated disc.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instrument.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpolated.			
Mar. 29	Ceres.....	16.7	30.2	43.6	57.0	10.4	m. 29	s. 43.58	+ 0.56	.....	+ 39.15	h. 13	m. 30	s. 23.29
Mar. 30	Sun 1 Limb.....	19.2	32.3	45.6	59.0	12.3	31	45.68	+ 0.78	.....	+ 39.90	0	32	26.36
	Sun 2 Limb.....	27.7	40.8	54.4	7.6	20.8	33	54.26	+ 0.78	.....	+ 39.90	0	34	34.94
	α Ursæ Minoris	5.0	15.5	27.5	41.0	54.5	0	28.70	-20.17	.....	+ 39.93	1	0	48.46
	Mercury 1 Limb	29.7	43.1	56.8	10.5	23.8	30	56.78	+ 0.72	.....	+ 39.96	1	31	37.46
	Venus 1 Limb.....	25.6	39.2	52.8	6.4	20.1	4	52.82	+ 0.71	.....	+ 40.00	2	5	33.53
	μ Geminorum.....	4.5	18.8	33.1	47.5	1.8	12	33.14	+ 0.61	+ 40.25	+ 40.28	6	13	14.03
	δ Ursæ Min. S. P.	54.0	37.5	20.5	3.5	.....	23	20.28	+ 10.50	.....	+ 40.29	6	24	11.07
	α Geminorum preced. ....	.....	23.4	.....	54.9	.....	23	39.15	+ 0.51	} 40.34 {	+ 40.36	7	24	20.02
	α Geminorum follow.	8.3	.....	39.7	.....	11.1	23	39.70	+ 0.51		+ 40.36	7	24	20.57
	α Canis Minoris	45.4	58.8	12.2	25.5	38.8	30	12.14	+ 0.77		+ 40.37	7	30	53.28
	β Geminorum.....	17.7	32.8	47.8	2.9	18.0	34	47.84	+ 0.56	40.30	+ 40.37	7	35	28.77
	A. S. C. 1099	18.1	37.8	57.8	17.6	37.5	51	57.76	+ 0.26	.....	+ 40.46	8	52	38.48
	ω Hydræ.....	23.1	36.4	49.8	3.1	16.5	56	49.78	+ 0.76	.....	+ 40.47	8	57	31.01
	27 Hydræ.....	30.4	43.7	57.3	10.4	24.2	11	57.20	+ 0.87	.....	+ 40.49	9	12	38.56
	α Hydræ.....	33.8	47.0	0.6	14.1	27.5	19	0.60	+ 0.87	40.53	+ 40.49	9	19	41.96
	τ^2 Hydræ.....	40.0	53.4	6.5	19.7	32.8	23	6.48	+ 0.81	.....	+ 40.50	9	23	47.79
	κ Hydræ.....	28.0	41.6	55.3	8.8	22.2	31	55.18	+ 0.91	.....	+ 40.51	9	32	36.60
	6 Sextantis.....	0.8	14.1	27.4	40.7	53.9	42	27.38	+ 0.84	.....	+ 40.53	9	43	8.75
	21 Leonis Minoris	43.4	59.7	16.2	32.5	48.8	57	16.12	+ 0.46	.....	+ 40.55	9	57	57.13
	21 Sextantis.....	0.5	13.7	27.3	40.5	53.9	5	27.18	+ 0.86	.....	+ 40.56	10	6	8.60
	23 Sextantis.....	36.6	.....	.....	.....	29.8	12	3.20	+ 0.79	.....	+ 40.57	10	12	44.56
	.....	.....	49.6	3.1	16.3	.....	.....	3.00	+ 0.79	.....	.....	.....	.....	..... †
	30 Leonis Minoris	29.1	45.2	1.4	17.5	33.6	16	1.36	+ 0.48	.....	+ 40.57	10	16	42.41
	44 Leonis Minoris	52.8	8.1	23.2	38.4	53.5	40	23.20	+ 0.55	.....	+ 40.61	10	41	4.36
	Groombridge 1850.....	11.5	49.0	26.0	2.5	.....	56	25.40	- 8.31	.....	+ 40.72	11	56	57.81
	\downarrow Virginis.....	52.6	6.2	19.4	33.0	46.3	45	19.50	+ 0.87	.....	+ 40.79	12	46	1.16
	Jupiter 1 Limb.....	.....	.....	41.6	.....	8.2	54	41.60	+ 0.84	.....	+ 40.80	12	55	23.24
	Jupiter 2 Limb.....	.....	.....	.....	58.1	.....	54	44.78	+ 0.84	.....	+ 40.80	12	55	26.42
	α Ursæ Min. S. P. ...	21.0	.....	.....	58.0	.....	59	45.75	+ 22.07	.....	+ 40.81	13	0	48.63
	Moon 2 Limb	38.3	52.4	6.2	20.2	34.0	10	6.22	+ 0.91	.....	+ 40.82	13	10	47.95
	α Virginis.....	36.4	49.8	3.3	17.0	30.4	16	3.38	+ 0.88	40.85	+ 40.83	13	16	45.09
	Ceres	26.5	40.0	53.4	6.7	20.1	28	53.34	+ 0.75	.....	+ 40.85	13	29	34.94
April 4	α Geminorum preced.	57.7	.....	29.2	.....	0.5	23	29.13	+ 0.53	} + 50.34 {	+ 50.52	7	24	20.18
	α Geminorum follow. ....	.....	13.7	.....	45.3	.....	23	29.50	+ 0.53		+ 50.52	7	24	20.55
	ϵ Hydræ.....	57.8	11.2	24.6	38.0	51.3	37	24.58	+ 0.78		+ 50.63	8	38	15.99
	ϵ Leonis	23.6	38.0	52.4	7.6	21.8	35	52.68	+ 0.62		+ 50.71	9	36	44.01
April 7	γ Aquilæ.....	11.4	24.7	38.4	51.9	5.4	37	38.36	+ 0.78	+ 57.79	+ 57.80	19	38	36.94
	β Aquilæ	59.4	12.8	26.2	39.6	52.8	46	26.16	+ 0.82	57.90	+ 57.81	19	47	24.79
	α Cygni.....	20.6	39.5	58.2	16.8	35.4	34	58.10	+ 0.35	57.79	+ 57.88	20	35	56.33
	α Ursæ Minoris.....	44.5	57.5	11.0	23.5	35.0	0	10.80	-21.56	.....	+ 58.25	1	0	46.99
April 8	Sun 1 Limb.....	46.9	0.4	13.6	27.1	40.6	4	13.27	+ 0.81	.....	+ 58.26	1	5	12.79
	Sun 2 Limb.....	56.0	9.5	22.9	36.3	49.8	6	22.90	+ 0.81	.....	+ 58.26	1	7	21.97
	α Arietis.....	38.3	52.6	7.1	21.4	35.7	57	7.02	+ 0.66	58.37	+ 58.33	1	58	6.01
	Mercury 1 Limb	16.4	30.2	44.1	57.9	11.7	14	44.06	+ 0.72	.....	+ 58.36	2	15	43.14
	Venus 1 Limb.....	39.1	52.8	6.7	20.5	34.3	47	6.68	+ 0.72	.....	+ 58.41	2	48	5.81
	α Aurigæ.....	11.5	30.6	49.6	8.6	27.7	3	49.60	+ 0.33	58.56	+ 58.63	5	4	48.56
	β Orionis.....	22.0	35.4	48.8	2.3	15.6	5	48.82	+ 0.94	58.56	+ 58.63	5	6	48.39
	β Tauri.....	37.8	53.0	8.3	23.4	38.5	15	8.20	+ 0.60	58.61	+ 58.65	5	16	7.45
	α Geminorum preced. ....	.....	4.9	.....	36.4	.....	23	20.65	+ 0.55	} 58.79 {	+ 58.86	7	24	20.06
	α Geminorum follow.	49.5	.....	20.8	.....	52.4	23	20.90	+ 0.55		+ 58.86	7	24	20.31
	α Canis Minoris	26.6	40.2	53.5	6.8	20.2	29	53.46	+ 0.82	58.87	+ 58.87	7	30	53.15
	20 Hydræ.....	17.4	31.0	44.4	57.8	11.2	0	44.36	+ 0.91	.....	+ 59.02	9	1	44.32
	21 Hydræ.....	3.5	16.8	30.2	43.6	56.9	3	30.20	+ 0.92	.....	+ 59.03	9	4	30.15

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
April 8	23 Hydræ.....	16.5	29.8	43.2	56.5	9.8	7	43.16	+ 0.92	.....	h. m. s. 9 8 43.11
	27 Hydræ.....	11.7	25.1	38.5	51.9	5.4	11	38.52	+ 0.94	.....	9 12 38.50
	τ ² Hydræ.....	21.2	34.5	47.9	1.2	14.4	22	47.84	+ 0.87	.....	9 23 47.77
	α Hydræ.....	9.0	22.7	36.5	50.3	3.8	31	36.46	+ 0.98	.....	9 32 36.51
	10 Sextantis.....	.....	41.6	55.3	8.7	.....	46	55.20	+ 0.79	.....	9 47 55.09
	.....	28.0	.....	.....	.....	22.0	.....	55.00	+ 0.79	.....	.....†
	A. S. C. 1199.....	18.9	32.5	46.1	59.7	13.4	53	46.12	+ 0.97	.....	9 54 46.20
	21 Leonis Minoris...	24.6	40.8	57.5	13.8	30.3	56	57.40	+ 0.50	.....	9 57 57.01
	λ ² Hydræ.....	18.4	32.0	45.5	59.4	12.6	1	45.58	+ 0.96	.....	10 2 45.66
	21 Sextantis.....	41.9	55.2	8.5	21.8	35.3	5	8.54	+ 0.93	.....	10 6 8.60
	22 Sextantis.....	12.4	25.7	39.3	42.6	6.0	8	39.20	+ 0.93	.....	10 9 39.26
	30 Leonis Minoris...	10.4	26.5	42.6	58.8	14.8	15	42.62	+ 0.52	.....	10 16 42.29
	1 Hydræ & Crateris...	58.7	12.3	26.5	40.4	54.0	27	26.38	+ 1.00	.....	10 28 26.55
	44 Leonis Minoris...	34.1	49.2	4.4	19.5	34.7	40	4.38	+ 0.59	.....	10 41 4.16
	6 Hydræ & Crateris...	10.2	24.4	38.5	52.6	6.6	44	38.46	+ 1.02	.....	10 45 38.67
	α Hydræ & Crateris...	29.5	43.5	57.5	11.4	25.4	50	57.46	+ 1.01	.....	10 51 57.67
	Mars 1 Limb.....	.....	49.3	.....	16.2	.....	58	2.75	+ 0.80	.....	10 59 2.77
	Mars 2 Limb.....	36.6	.....	3.7	.....	30.5	58	3.60	+ 0.80	.....	10 59 3.62
	α Hydræ & Crateris...	37.5	51.1	4.5	18.2	31.5	18	4.56	+ 0.96	.....	11 19 4.77
	86 Leonis.....	38.4	52.6	6.7	20.6	34.7	21	6.60	+ 0.70	.....	11 22 6.55
	24 Hydræ & Crateris...	3.8	17.5	31.1	44.6	58.3	29	31.06	+ 0.97	.....	11 30 31.29
	Groombridge 1884...	3.0	1.0	2.0	5.0	8.5	15	3.90	- 23.82	.....	12 15 39.42
	Groomb. 144 S. P....	28.0	.....	13.0	6.0	2.0	40	13.90	+ 19.93	.....	12 41 33.21
	A. S. C. 91 S. P.	56.5	41.0	25.5	.....	57.0	46	26.32	+ 8.56	.....	12 47 34.27
	Jupiter 1 Limb.....	.....	54.2	.....	21.0	.....	50	7.60	+ 0.90	.....	12 51 7.89
	Jupiter 2 Limb.....	43.8	.....	10.6	.....	37.3	50	10.57	+ 0.90	.....	12 51 10.86
	α Ursæ Minoris S. P.	59.5	11.0	25.0	36.0	49.5	59	24.20	+ 23.58	.....	13 0 47.19
	Pallas.....	53.7	7.7	21.7	35.5	49.4	5	21.60	+ 0.72	.....	13 6 21.74
	Groombridge 2007...	12.0	4.5	.....	49.5	43.0	20	57.22	- 6.90	.....	13 21 49.76
April 9	μ Geminorum.....	43.4	57.7	12.1	26.5	40.8	12	12.10	+ 0.58	+ 61.16	6 13 13.77
	δ Ursæ Minoris S. P.	36.5	19.5	2.5	44.5	28.0	23	2.20	+ 10.11	.....	.....
	α Canis Majoris.....	34.0	47.7	1.6	15.5	29.5	37	1.66	+ 0.87	61.19	6 38 3.66
	15 Lyncis.....	28.0	53.6	19.1	44.6	10.2	42	19.10	- 0.04	.....	6 43 20.20
	19 Monocerotis.....	26.9	40.3	53.7	7.2	20.4	53	53.70	+ 0.79	.....	6 54 55.65
	22 Monocerotis.....	10.9	24.1	37.4	50.6	3.8	2	37.36	+ 0.76	.....	7 3 39.29
	δ Geminorum.....	0.7	15.1	29.4	43.7	58.1	9	29.40	+ 0.58	61.19	7 10 31.17
	δ ¹ Canis Minoris.....	16.3	29.7	43.0	56.2	9.6	22	42.96	+ 0.74	.....	7 23 44.91
	δ ³ Canis Minoris.....	21.3	34.6	47.9	1.2	14.5	24	47.90	+ 0.73	.....	7 25 49.84
	α Canis Minoris.....	24.5	37.8	51.2	4.5	17.8	29	51.16	+ 0.72	61.26	7 30 53.10
	β Geminorum.....	56.7	11.8	27.0	42.1	57.2	34	26.96	+ 0.52	61.04	7 35 28.71
	Mars 1 Limb.....	50.8	.....	17.8	.....	44.9	57	17.83	+ 0.69	.....	10 58 20.10
	Mars 2 Limb.....	.....	5.2	.....	32.3	.....	57	18.75	+ 0.69	.....	10 58 21.02
	Pallas.....	7.2	21.1	35.0	48.8	2.7	4	34.96	+ 0.62	.....	13 5 37.38
	Ceres.....	34.6	48.1	1.4	14.7	28.2	20	1.40	+ 0.70	.....	13 21 3.93
	α Ursæ Minoris.....	43.5	55.5	10.0	21.0	33.5	0	8.70	- 18.75	.....	1 0 52.99
April 10	Sun 1 Limb.....	1.3	15.0	28.5	41.7	55.2	11	28.34	+ 0.67	.....	1 12 32.07
	Sun 2 Limb.....	10.8	24.0	37.7	51.0	4.4	13	37.58	+ 0.67	.....	1 14 41.31
	α Arietis.....	33.7	48.0	2.4	16.7	31.2	57	2.40	+ 0.55	+ 63.10	1 58 6.09
	Mercury 1 Limb.....	20.4	34.4	48.2	2.2	16.2	20	48.28	+ 0.59	.....	2 21 52.05
	Venus 1 Limb.....	12.0	26.0	40.0	53.9	7.9	56	39.96	+ 0.59	.....	2 57 43.79
	η Tauri.....	22.5	36.8	51.3	5.8	20.4	36	51.36	+ 0.54	63.33	3 37 55.21
	α Tauri.....	9.6	23.5	37.4	51.2	5.1	25	37.36	+ 0.60	63.37	4 26 41.36
	μ Geminorum.....	41.0	55.4	9.8	24.2	38.6	12	9.80	+ 0.55	63.48	6 13 13.91
	δ Ursæ Minoris S. P.	34.0	17.0	0.0	42.0	25.0	22	59.60	+ 9.74	.....	6 24 12.91
	α Canis Majoris.....	31.6	45.5	59.4	13.3	27.2	36	59.40	+ 0.51	63.79	6 38 3.50
	15 Lyncis.....	25.6	51.2	16.8	42.2	7.8	42	16.72	- 0.05	.....	6 43 20.27

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.			observed.	interpolated.			
April 10	A. C. S. 874.....	22.0	7.0	51.6	37.0	22.0	55	51.92	- 3.29	.....	+ 63.62	h. m. s.	6 56 52.25
	ε Canis Minoris.....	20.3	33.8	47.4	0.8	14.4	15	47.34	+ 0.65	.....	+ 63.65		7 16 51.64
	20 Hydræ.....	12.8	26.3	39.6	53.1	6.5	0	39.66	+ 0.78	.....	+ 63.81		9 1 44.25
	21 Hydræ.....	58.7	12.2	25.6	39.0	52.5	3	25.60	+ 0.76	.....	+ 63.82		9 4 30.18
	23 Hydræ.....	11.6	25.0	38.4	52.0	5.4	7	38.48	+ 0.76	.....	+ 63.82		9 8 43.06
	40 Lyncis.....	38.9	55.3	11.6	27.7	43.8	10	11.46	+ 0.42	.....	+ 63.83		9 11 15.71
	τ ² Hydræ.....	16.6	29.7	43.0	56.4	9.7	22	43.08	+ 0.72	.....	+ 63.84		9 23 47.64
	α Hydræ.....	4.2	18.2	31.6	45.6	59.2	31	31.76	+ 0.81	.....	+ 63.86		9 32 36.43
	6 Sextantis.....	37.3	50.7	4.0	17.5	30.6	42	4.02	+ 0.74	.....	+ 63.87		9 43 8.63
	A. S. C. 1195.....	52.2	.....	.....	.....	45.5	50	18.85	+ 0.69	.....	+ 63.89		9 51 23.43
	.....	.....	5.1	18.5	31.7	.....	.....	18.43	+ 0.69	.....	.....	.....	.....†
	21 Leonis Minoris.....	20.0	36.5	52.9	9.2	25.6	56	52.84	+ 0.41	.....	+ 63.90		9 57 57.15
	21 Sextantis.....	37.1	50.5	3.7	17.2	30.6	5	3.82	+ 0.77	.....	+ 63.91		10 6 8.50
	22 Sextantis.....	7.8	21.2	34.6	48.1	1.4	8	34.62	+ 0.77	.....	+ 63.91		10 9 39.30
	Mars 1 Limb.....	.....	22.1	.....	.....	.....	56	35.57	+ 0.65	.....	+ 63.98		10 57 40.20
	Mars 2 Limb.....	.....	.....	.....	.....	3.4	56	36.46	+ 0.65	.....	+ 63.98		10 57 41.09
	Groombridge 1884.....	56.0	54.0	55.0	57.5	59.0	14	56.30	- 20.72	.....	+ 64.10		12 15 39.68
	Jupiter 1 Limb.....	40.0	.....	6.7	.....	33.1	49	6.60	+ 0.74	.....	+ 64.15		12 50 11.49
	Jupiter 2 Limb.....	.....	56.4	.....	22.8	.....	49	9.60	+ 0.74	.....	+ 64.15		12 50 14.49
	α Ursæ Minoris S. P.	4.0	.....	27.0	40.0	54.0	59	28.18	+ 20.47	.....	+ 64.17		13 0 52.82
	Pallas.....	.....	.....	.....	2.3	16.2	3	48.39	+ 0.58	.....	+ 64.18		13 4 53.15
April 11	Sun 1 Limb.....	39.2	52.8	5.9	19.5	33.1	15	6.10	+ 0.70	.....	+ 65.28		1 16 12.08
	Sun 2 Limb.....	48.3	2.0	15.4	28.8	42.3	17	15.36	+ 0.70	.....	+ 65.28		1 18 21.34
	(a) Venus 1 Limb.....	.....	14.2	28.3	42.1	56.1	2	28.19	+ 0.62	.....	+ 5.44		3 2 34.25
	α Tauri.....	7.4	21.3	35.1	48.8	2.8	26	35.08	+ 0.63	+ 5.61	+ 5.56		4 26 41.27
	δ Geminorum.....	56.1	10.4	24.6	39.1	53.4	10	24.72	+ 0.57	5.85	+ 5.81		7 10 31.10
	α Geminorum preced.....	.....	57.7	.....	29.3	.....	24	13.50	+ 0.47	{ 5.86 }	+ 5.84		7 24 19.81
	α Geminorum follow.....	42.4	.....	14.0	.....	45.4	24	13.93	+ 0.47		+ 5.84		7 24 20.24
	α Canis Minoris.....	19.8	33.2	46.6	59.9	13.3	30	46.56	+ 0.71	5.84	+ 5.85		7 30 53.12
	β Geminorum.....	51.8	7.1	22.3	37.4	52.5	35	22.22	+ 0.52	5.75	+ 5.85		7 35 28.59
	α Ursæ Minoris.....	.....	.....	5.5	17.5	29.5	1	5.50	- 21.27	.....	+ 7.49		1 0 51.72
April 12	Sun 1 Limb.....	17.2	30.7	44.1	57.6	11.1	19	44.14	+ 0.72	.....	+ 7.52		1 19 52.38
	Sun 2 Limb.....	26.6	40.1	53.6	6.9	20.4	21	53.52	+ 0.72	.....	+ 7.52		1 22 1.76
	α Arietis.....	29.0	43.4	57.7	12.0	26.6	57	57.74	+ 0.59	+ 7.73	+ 7.58		1 58 5.91
	Venus 1 Limb.....	49.4	3.4	17.2	31.3	45.3	7	17.32	+ 0.64	.....	+ 7.69		3 7 25.65
	μ Geminorum.....	36.6	50.8	5.2	19.6	34.2	13	5.28	+ 0.59	7.93	+ 7.98		6 13 13.85
	δ Ursæ Minoris S. P.	31.0	13.5	56.5	39.5	23.0	23	56.70	+ 10.98	.....	+ 8.00		6 21 15.68
	α Canis Majoris.....	27.1	41.0	51.8	8.6	22.6	37	54.82	+ 0.92	7.92	+ 8.02		6 38 3.76
	α Ursæ Minoris.....	.....	50.5	.....	.....	.....	1	2.40	- 21.29	.....	+ 9.75		1 0 50.86
April 13	Sun 1 Limb.....	56.1	9.8	.....	36.5	50.1	23	23.12	+ 0.70	.....	.....	.....	.....
	Sun 2 Limb.....	5.7	19.3	32.6	46.2	59.6	25	32.68	+ 0.70	.....	.....	.....	.....
	(b) α Geminorum preced.....	48.2	.....	19.7	.....	51.1	24	19.67	+ 0.45	{ - 0.29 }	- 0.25		7 24 19.87
	α Geminorum follow.....	.....	4.4	.....	35.7	.....	20	20.05	+ 0.45		- 0.25		7 24 20.25
	α Canis Minoris.....	25.9	39.4	52.7	6.1	19.4	30	52.70	+ 0.72	0.34	- 0.27		7 30 53.15
	β Geminorum.....	58.2	13.4	28.5	43.5	58.6	35	28.44	+ 0.51	0.49	- 0.27		7 35 28.68
	δ Leonis.....	5.9	20.2	34.5	48.8	3.2	5	34.52	+ 0.58	0.63	- 0.80		11 5 34.30
	β Leonis.....	25.4	39.1	52.8	6.5	20.5	40	52.86	+ 0.63	0.75	- 0.89		11 40 52.60
	α Ursæ Minoris S. P.	4.0	.....	32.0	42.5	.....	0	30.13	+ 23.11	.....	- 1.10		13 0 52.14
April 15	α Geminorum preced.....	55.4	.....	26.7	.....	58.3	24	26.80	+ 0.45	{ - 7.45 }	- 7.52		7 24 19.73
	α Geminorum follow.....	.....	11.5	.....	42.8	.....	21	27.15	+ 0.45		- 7.52		7 24 20.08
	α Canis Minoris.....	33.3	46.5	59.8	13.2	26.4	30	59.84	+ 0.72	7.51	- 7.54		7 30 53.02
	β Geminorum.....	5.5	20.5	35.6	50.6	5.7	35	35.58	+ 0.51	7.67	- 7.55		7 35 28.54
	Ceres.....	31.7	45.5	58.8	12.3	25.6	15	58.78	+ 0.70	.....	- 8.41		13 15 51.07
	ζ Virginis.....	12.7	26.1	39.4	52.5	5.8	26	39.30	+ 0.77	.....	- 8.44		13 26 31.63

(a) Clock put forward one minute.

(b) The Clock was taken away by Mr Bryson to be cleaned. For the following observations the Circle Clock was employed, which in calm weather is heard at the Transit Instrument.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instrument.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.	m.	s.		observed.	interpolated.	
April 15	82 Virginis.....	52.8	6.5	19.8	33.2	46.6	33	19.78	+ 0.83	.....	- 8.46	h. m. s. 13 33 12.15
April 16	INSTRUMENT REVERSED.											
April 17	(a) α Geminorum preced.	.....	7.8	.....	39.3	.....	24	23.55	+ 0.62	} - 4.48	- 4.69	7 24 19.48
	α Geminorum follow.	52.6	.....	24.1	.....	55.5	24	24.07	+ 0.62		- 4.69	7 24 20.00
	α Canis Minoris.....	29.9	43.4	56.7	10.1	23.5	30	56.72	+ 0.84	4.55	- 4.68	7 30 52.88
	β Geminorum	2.0	17.2	32.4	47.5	2.5	35	32.32	+ 0.65	4.58	- 4.67	7 35 28.30
	ϵ Leonis.....	18.6	33.0	47.6	2.3	16.9	36	47.68	+ 0.67	4.48	- 4.43	9 36 43.92
	6 Sextantis.....	45.8	59.0	12.4	25.7	38.9	43	12.36	+ 0.91	.....	- 4.42	9 43 8.85
	α Leonis.....	25.3	39.0	52.9	6.7	20.2	59	52.82	+ 0.77	4.38	- 4.38	9 59 49.21
	μ Ursæ Majoris	13.4	31.2	49.2	7.1	25.0	12	49.18	+ 0.50	.....	- 4.35	10 12 45.33
	30 Leonis Minoris	13.9	30.2	46.4	2.5	18.5	16	46.30	+ 0.59	.....	- 4.34	10 16 42.55
	40 Leonis Minoris	47.1	1.8	16.8	31.7	46.7	34	16.82	+ 0.66	.....	- 4.31	10 34 13.17
	Mars 1 Limb	0.1	.....	27.0	.....	53.8	54	26.97	+ 0.80	.....	- 4.27	10 54 23.50
	Mars 2 Limb .....	.....	14.3	.....	41.3	.....	54	27.80	+ 0.80	.....	- 4.27	10 54 24.33
	π Hydræ & Crateris...	41.4	55.0	8.5	21.8	35.5	19	8.44	+ 0.97	.....	- 4.22	11 19 5.19
	β Leonis	28.6	42.6	56.4	10.1	23.8	40	56.30	+ 0.94	4.51	- 4.18	11 40 53.06
	2 Comæ Berenices...	38.4	53.1	7.5	21.8	36.3	56	7.42	+ 0.70	.....	- 4.14	11 56 3.98
	Groomb. 144 S. P....	42.5	.....	30.5	22.0	14.5	41	29.20	+ 11.29	.....	- 4.06	12 41 36.43
	Jupiter 1 Limb.....	35.9	.....	.....	.....	29.2	47	2.55	+ 0.91	.....	- 4.04	12 46 59.42
	Jupiter 2 Limb.....	.....	52.2	.....	18.7	.....	47	5.45	+ 0.91	.....	- 4.04	12 47 2.32
	(b) Pallas.....	31.7	45.5	.....	.....	27.8	59	59.68	+ 0.72	.....	- 4.02	12 59 56.38
	α Ursæ Minoris S. P.	17.5	30.0	.....	53.5	7.5	0	42.21	+ 13.33	.....	- 4.02	.....
	(b) Ceres	45.6	.....	.....	.....	39.4	14	12.50	+ 0.81	.....	- 3.99	13 14 9.32
	α Ursæ Minoris .....	.....	.....	.....	16.0	.....	1	4.20	- 9.35	.....	- 2.57	1 0 52.28
April 18	Venus 1 Limb.....	.....	.....	58.3	12.5	.....	36	58.30	+ 0.63	.....	- 2.26	3 36 56.67
	β Tauri.....	38.6	53.6	8.7	23.8	38.8	16	8.70	+ 0.57	- 1.98	- 2.06	5 16 7.21
	α Orionis	2.2	15.5	29.0	42.5	55.8	46	29.00	+ 0.73	2.01	- 2.00	5 46 27.73
	Moon 1 Limb.....	1.7	17.2	33.0	48.3	3.8	12	32.80	+ 0.59	.....	- 1.95	6 12 31.44
	δ Ursæ Minoris S. P.	.....	31.0	13.5	57.0	39.5	24	13.80	+ 5.16	.....	- 1.93	6 24 17.03
	ϵ Geminorum	34.0	48.7	3.4	18.2	32.8	34	3.42	+ 0.59	.....	- 1.91	6 34 2.10
	α Canis Majoris	37.0	50.8	4.7	18.5	32.4	38	4.68	+ 0.90	2.01	- 1.90	6 38 3.68
	τ Geminorum.....	24.5	39.9	55.4	10.8	26.2	0	55.36	+ 0.56	.....	- 1.86	7 0 54.06
	α Geminorum preced.	49.5	.....	21.0	.....	52.4	24	20.97	+ 0.55	} 1.75	- 1.81	7 24 19.71
	α Geminorum follow.	.....	5.6	.....	37.0	.....	24	21.30	+ 0.55		- 1.81	7 24 20.04
	α Canis Minoris	27.4	40.7	54.1	7.4	20.7	30	54.06	+ 0.73	1.79	- 1.80	7 30 52.99
	β Geminorum	59.5	14.5	29.6	44.6	59.8	35	29.60	+ 0.57	1.80	- 1.79	7 35 28.38
	μ Ursæ Majoris.....	10.6	28.6	46.5	4.5	22.5	12	46.54	+ 0.46	.....	- 1.51	10 12 45.49
	40 Leonis Minoris	44.0	59.1	14.0	28.8	43.8	34	13.94	+ 0.58	.....	- 1.47	10 34 13.05
	Mars 1 Limb .....	.....	54.4	.....	21.4	.....	54	7.90	+ 0.70	.....	- 1.43	10 54 7.17
	Mars 2 Limb	41.8	.....	8.8	.....	35.8	54	8.80	+ 0.70	.....	- 1.43	10 54 8.07
	67 Leonis.....	43.8	58.7	13.5	28.2	42.8	0	13.40	+ 0.59	.....	- 1.42	11 0 12.57
	93 Leonis.....	15.2	29.5	43.7	57.8	12.2	39	43.68	+ 0.63	.....	- 1.35	11 39 42.96
	Groomb. 144 S. P....	39.0	33.0	25.5	19.0	11.5	41	25.60	+ 9.02	.....	- 1.23	12 41 33.39
	Jupiter 1 Limb.....	.....	19.8	.....	46.2	.....	46	33.00	+ 0.80	.....	- 1.23	12 46 32.57
	Jupiter 2 Limb.....	9.5	.....	35.9	.....	2.7	46	36.03	+ 0.80	.....	- 1.23	12 46 35.60
	Pallas	48.8	2.8	17.0	31.0	45.2	59	16.96	+ 0.64	.....	- 1.20	12 59 16.40
	α Ursæ Minoris S. P.	20.0	.....	42.5	54.0	6.5	0	42.80	+ 10.63	.....	- 1.20	13 0 52.23
	Ceres	52.4	5.7	19.3	32.6	46.0	13	19.20	+ 0.71	.....	- 1.18	13 13 18.73
	Groombridge 2007....	10.0	4.0	56.0	49.0	42.0	21	56.20	- 2.86	.....	- 1.16	13 21 52.18
	α Ursæ Minoris.....	38.0	.....	1.5	14.0	.....	1	1.73	- 9.70	.....	+ 0.12	1 0 52.15
April 19	ϵ Geminorum	31.2	45.7	0.6	15.4	30.1	34	0.60	+ 0.61	.....	+ 0.73	6 34 1.94
	α Canis Majoris	34.2	48.2	1.8	15.7	29.6	38	1.90	+ 0.92	+ 0.73	+ 0.74	6 38 3.56
	Moon 1 Limb	33.3	48.8	4.1	19.3	34.7	16	4.04	+ 0.62	.....	+ 0.81	7 16 5.47

(a) The Clock having been cleaned was replaced.

(b) Very faint.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
April 19	α Geminorum preced.	s.	s. 2.5	s.	s. 33.8	s.	m. 24	s. 18.15	+ 0.56	} + 0.96	+ 0.83	h. m. s. 7 24 19.54
	α Geminorum follow.	47.3	.....	18.6	.....	50.0	24	18.63	+ 0.56		+ 0.83	7 24 20.02
	α Canis Minoris	24.6	37.8	51.3	4.6	18.1	30	51.28	+ 0.75	0.95	+ 0.84	7 30 52.87
	α Leonis	20.3	33.9	47.3	1.1	14.7	59	47.46	+ 0.70	1.03	+ 1.11	9 59 49.27
	Mars 1 Limb	24.7	.....	51.8	.....	18.8	53	51.77	+ 0.72	.....	+ 1.21	10 53 53.70
	Mars 2 Limb	.....	39.3	.....	6.2	.....	53	52.75	+ 0.72	.....	+ 1.21	10 53 54.68
	67 Leonis	41.4	55.8	10.8	25.5	40.3	0	10.76	+ 0.61	.....	+ 1.22	11 0 12.59
	δ Leonis	4.1	18.6	32.7	46.8	1.3	5	32.70	+ 0.64	1.08	+ 1.23	11 5 34.57
	Jupiter 1 Limb	37.7	.....	4.0	.....	30.5	46	4.07	+ 0.82	.....	+ 1.41	12 46 6.30
	Jupiter 2 Limb	.....	53.8	.....	20.2	.....	46	7.00	+ 0.82	.....	+ 1.41	12 46 9.23
	Pallas	6.8	21.1	35.1	49.3	3.3	58	35.12	+ 0.65	.....	+ 1.44	12 58 37.21
	α Ursæ Minoris S. P.	15.0	26.0	40.0	53.0	3.5	0	39.50	+ 11.02	.....	+ 1.44	13 0 51.96
	Ceres	59.7	13.2	26.5	39.8	53.4	12	26.52	+ 0.73	.....	+ 1.46	13 12 28.71
	α Ursæ Minoris	.....	.....	.....	11.0	.....	0	59.30	- 10.77	.....	+ 2.76	1 0 51.29
April 20	(a) Sun 1 Limb	55.9	9.8	23.2	36.8	50.4	49	23.22	+ 0.75	.....	+ 3.01	1 49 26.98
	Sun 2 Limb	6.3	19.8	33.4	47.0	0.5	51	33.40	+ 0.75	.....	+ 3.01	1 51 37.16
	α Aurigæ	6.3	25.3	44.4	3.6	22.7	4	44.46	+ 0.43	+ 3.41	+ 3.31	5 4 48.20
	β Orionis	17.0	30.4	43.7	57.2	10.7	6	43.80	+ 0.90	3.48	+ 3.32	5 6 48.02
	β Tauri	33.0	48.2	3.3	18.5	33.5	16	3.30	+ 0.61	3.35	+ 3.33	5 16 7.24
	Mars 1 Limb	.....	25.2	.....	52.1	.....	53	38.65	+ 0.76	.....	+ 3.87	10 53 43.28
	Mars 2 Limb	12.7	.....	39.8	.....	6.7	53	39.73	+ 0.76	.....	+ 3.87	10 53 44.36
	δ Leonis	1.4	15.6	30.0	44.3	58.5	5	29.96	+ 0.67	3.79	+ 3.89	11 5 34.52
	δ Hydræ & Crateris	47.2	1.1	14.7	28.6	42.2	11	14.76	+ 0.95	3.73	+ 3.90	11 11 19.61
	Jupiter 1 Limb	.....	22.1	.....	48.7	.....	45	35.40	+ 0.86	.....	+ 4.05	12 45 40.31
	Jupiter 2 Limb	11.6	.....	38.3	.....	4.9	45	38.27	+ 0.86	.....	+ 4.05	12 45 43.18
	Pallas	25.8	40.2	54.2	8.3	22.5	57	54.20	+ 0.68	.....	+ 4.07	12 57 58.95
	α Ursæ Minoris S. P.	.....	25.0	34.0	46.0	59.0	0	35.08	+ 12.17	.....	+ 4.07	13 0 51.32
	Ceres	7.7	21.4	34.6	.....	.....	11	34.63	+ 0.76	.....	+ 4.18	13 11 39.57
April 21	δ Cancri	58.4	12.2	26.3	40.3	54.4	35	26.32	+ 0.73	.....	+ 5.92	8 35 32.97
	ξ Cancri	31.4	45.8	0.4	14.8	29.3	0	0.34	+ 0.69	.....	+ 5.96	9 0 6.99
	π^1 Cancri	55.6	9.4	23.3	37.1	50.7	3	23.22	+ 0.76	.....	+ 5.96	9 3 29.94
	π^2 Cancri	47.0	0.8	14.7	28.6	42.4	6	14.70	+ 0.76	.....	+ 5.97	9 6 21.43
	Moon 1 Limb	15.6	30.0	44.4	58.7	13.1	8	44.36	+ 0.74	.....	+ 5.97	9 8 51.07
	α Hydræ	7.8	21.3	34.6	48.1	1.5	19	34.66	+ 0.96	+ 6.11	+ 5.99	9 19 41.61
	λ Leonis	57.4	11.6	26.2	40.6	55.2	22	26.20	+ 0.69	.....	+ 5.99	9 22 32.88
	ψ Leonis	24.5	38.3	52.0	5.6	19.5	34	51.98	+ 0.77	.....	+ 6.01	9 34 58.76
	ϵ Leonis	7.8	22.4	36.9	51.4	6.2	36	36.94	+ 0.68	6.19	+ 6.02	9 36 43.64
	α Leonis	15.4	29.0	42.7	56.2	9.8	59	42.62	+ 0.78	5.77	+ 6.05	9 59 49.45
April 23	(b) Venus 1 Limb	30.2	44.5	58.9	13.2	27.4	1	58.84	+ 0.76	.....	+ 0.54	4 2 0.14
	α Tauri	12.2	25.7	39.8	53.6	7.5	26	39.76	+ 0.82	+ 0.65	+ 0.56	4 26 41.14
	α Aurigæ	9.0	28.2	47.2	6.3	25.3	4	47.20	+ 0.47	0.60	+ 0.59	5 4 48.26
	β Orionis	19.7	33.2	46.6	0.2	13.6	6	46.66	+ 1.04	0.46	+ 0.59	5 6 48.29
	β Tauri	35.8	50.7	5.9	21.1	36.2	16	5.94	+ 0.69	0.61	+ 0.59	5 16 7.22
	α Leonis	20.5	31.0	47.5	1.1	14.6	59	47.54	+ 0.84	0.77	+ 0.77	9 59 49.15
	α Ursæ Minoris S. P.	.....	.....	37.0	.....	59.0	0	36.35	+ 15.63	.....	+ 0.89	.....
April 24	Sun 1 Limb	54.2	7.6	21.3	35.0	48.6	4	21.34	+ 0.75	.....	+ 1.40	2 4 23.49
	Sun 2 Limb	4.7	18.5	32.0	45.7	59.4	6	32.06	+ 0.75	.....	+ 1.40	2 6 34.21
	Venus 1 Limb	32.7	47.2	1.7	16.1	30.5	7	1.64	+ 0.68	.....	+ 1.47	4 7 3.79
	α Tauri	11.5	25.2	39.2	52.7	6.5	26	39.02	+ 0.73	+ 1.48	+ 1.49	4 26 41.24
	α Aurigæ	8.0	27.2	46.4	5.5	24.5	4	46.32	+ 0.43	1.51	+ 1.51	5 4 48.26
	(c) α Geminorum preced.	.....	1.7	.....	33.2	.....	24	17.45	+ 0.60	} + 1.53	+ 1.52	7 24 19.57
	α Geminorum follow.	46.5	.....	18.0	.....	49.4	24	17.97	+ 0.60		+ 1.52	7 24 20.09
	α Canis Minoris	23.7	37.3	50.5	3.9	17.3	30	50.54	+ 0.82	1.55	+ 1.52	7 30 52.88
	β Geminorum	55.8	11.0	26.2	41.4	56.5	35	26.18	+ 0.63	1.47	+ 1.52	7 35 28.33

(a) At 1^h 46^m three pieces of Wire were laid on the jar of the Pendulum.(b) Clock stopped on April 22 at 3^h 23^m and Pendulum altered.(c) At 6^h 31^m three pieces of Wire were laid on the jar of the Pendulum.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpol- ated.	
April 24	Mars 1 Limb	0.5	.....	27.4	.....	54.4	53 27.43	+ 0.78	.....	+ 1.50	10 53 29.71
	Mars 2 Limb .....	.....	15.0	.....	41.9	.....	53 28.45	+ 0.78	.....	+ 1.50	10 53 30.73
	♌ Leonis	15.6	28.8	42.4	55.8	9.3	56 42.38	+ 0.79	.....	+ 1.50	10 56 44.67
	♍ Leonis	12.5	25.7	39.2	52.5	5.8	19 39.14	+ 0.83	.....	+ 1.50	11 19 41.47
	Moon 1 Limb	49.7	3.2	16.7	30.1	43.7	28 16.68	+ 0.84	.....	+ 1.50	11 28 19.02
	♍ Virginis	51.7	5.2	18.5	31.7	45.2	42 18.46	+ 0.83	.....	+ 1.50	11 42 20.79
	♎ Virginis	33.4	47.1	0.5	13.8	27.4	57 0.44	+ 0.78	.....	+ 1.50	11 57 2.72
	Jupiter 1 Limb	30.4	.....	57.0	.....	23.7	43 57.03	+ 0.95	.....	+ 1.50	12 43 59.48
	Jupiter 2 Limb .....	.....	46.8	.....	13.3	.....	44 0.05	+ 0.95	.....	+ 1.50	12 44 2.50
April 26	♌ Ursæ Minoris S. P. ....	.....	27.0	.....	.....	.....	0 38.60	+ 12.92	.....	+ 1.50	.....
	♌ Leonis	19.6	33.3	46.8	0.5	14.2	59 46.88	+ 0.66	+ 1.57	+ 1.30	9 59 48.84
	Mars 1 Limb	10.6	.....	37.4	.....	4.4	53 37.47	+ 0.68	.....	+ 1.29	10 53 39.44
	Mars 2 Limb .....	.....	24.7	.....	51.6	.....	53 38.15	+ 0.68	.....	+ 1.29	10 53 40.12
	♌ Leonis	4.0	18.3	32.5	46.8	1.2	5 32.56	+ 0.60	1.21	+ 1.29	11 5 34.45
	♍ Leonis	23.4	.....	.....	4.6	18.2	40 50.81	+ 0.64	1.23	+ 1.29	11 40 52.74
	♍ Virginis .....	.....	.....	.....	43.7	57.0	33 30.43	+ 0.75	.....	+ 1.30	12 33 32.48
	Jupiter 1 Limb .....	.....	55.4	.....	22.0	.....	43 8.70	+ 0.77	.....	+ 1.30	12 43 10.77
	Jupiter 2 Limb	45.2	.....	11.5	.....	38.2	43 11.63	+ 0.77	.....	+ 1.30	12 43 13.70
	12 Canum Venat.	56.2	13.5	30.6	47.6	4.8	48 30.54	+ 0.45	1.09	+ 1.30	12 48 32.29
	Moon 1 Limb	52.5	6.3	20.2	33.8	47.3	54 20.02	+ 0.82	.....	+ 1.30	12 54 22.14
	♌ Ursæ Minoris S. P. ....	.....	.....	42.5	52.0	.....	0 41.50	+ 10.98	.....	+ 1.30	.....
	Ceres .....	.....	.....	.....	10.0	23.5	6 56.62	+ 0.69	.....	+ 1.30	13 6 58.61
	♌ Virginis	16.3	29.6	43.1	56.7	10.1	16 43.16	+ 0.82	1.33	+ 1.30	13 16 45.28
April 27	Sun 1 Limb	10.7	24.2	38.2	51.7	5.5	15 38.06	+ 0.67	.....	+ 1.41	2 15 40.11
	Sun 2 Limb	21.7	35.5	49.2	3.0	16.7	17 49.22	+ 0.67	.....	+ 1.41	2 17 51.30
	♌ Leonis .....	.....	.....	.....	0.2	14.0	59 46.70	+ 0.67	+ 1.73	+ 1.48	9 59 48.85
	♌ Leonis	3.8	17.8	32.2	46.5	.....	5 32.21	+ 0.61	1.54	+ 1.49	11 5 31.31
	♌ Ursæ Minoris S. P. ....	.....	.....	.....	53.0	.....	0 41.20	+ 11.74	.....	+ 1.50	.....
	Ceres .....	.....	59.1	12.5	25.7	39.4	6 12.46	+ 0.71	.....	+ 1.50	13 6 14.67
	♌ Virginis	16.2	29.6	43.1	56.5	10.3	16 43.14	+ 0.84	1.33	+ 1.50	13 16 45.48
	Moon 1 Limb	9.0	23.0	36.8	50.8	5.1	38 36.94	+ 0.91	.....	+ 1.50	13 38 39.35
	♍ Bootis	33.5	47.5	1.6	15.5	29.5	47 1.52	+ 0.63	1.42	+ 1.50	13 47 3.65
April 29	Mars 1 Limb .....	.....	57.7	.....	25.0	.....	54 11.35	+ 0.91	.....	+ 1.55	10 54 13.81
	Mars 2 Limb	45.3	.....	12.3	.....	39.4	54 12.33	+ 0.91	.....	+ 1.55	10 54 14.79
	♌ Leonis	3.4	17.6	31.9	46.1	0.5	5 31.90	+ 0.82	+ 1.62	+ 1.55	11 5 34.27
	♌ Hydræ & Crateris ...	49.5	3.2	16.6	30.6	44.3	11 16.84	+ 1.10	1.43	+ 1.55	11 11 19.49
	Jupiter 1 Limb .....	.....	.....	59.0	.....	25.4	41 58.90	+ 1.00	.....	+ 1.55	12 42 1.45
	Jupiter 2 Limb .....	.....	.....	.....	14.9	.....	42 1.61	+ 1.00	.....	+ 1.55	12 42 4.16
	12 Canum Venat.	55.6	12.7	29.8	46.8	4.0	48 29.78	+ 0.66	1.64	+ 1.56	12 48 32.00
	♌ Ursæ Minoris S. P.	18.0	.....	.....	49.5	8.0	0 41.30	+ 12.32	.....	+ 1.56	.....
	Ceres	20.7	33.8	47.5	0.8	14.3	4 47.42	+ 0.91	.....	+ 1.56	13 4 49.89
April 30	♌ Bootis	27.3	42.5	57.7	12.8	27.8	37 57.62	+ 0.77	1.51	+ 1.58	14 37 59.97
	Jupiter 1 Limb .....	.....	23.0	.....	49.7	.....	41 36.35	+ 0.75	.....	+ 1.89	12 41 38.99
	Jupiter 2 Limb .....	.....	.....	39.3	.....	6.1	41 39.40	+ 0.75	.....	+ 1.89	12 41 42.01
	12 Canum Venat.	55.4	12.4	29.6	46.7	3.8	48 29.58	+ 0.43	+ 2.06	+ 1.90	12 48 31.91
	Pallas	59.3	13.6	27.7	42.0	56.4	52 27.80	+ 0.58	.....	+ 1.90	12 52 30.28
	♌ Ursæ Minoris S. P. ....	.....	.....	41.5	54.5	.....	0 42.30	+ 10.96	.....	+ 1.90	.....
	Ceres	39.6	53.0	6.5	19.9	33.4	4 6.48	+ 0.67	.....	+ 1.90	13 4 9.05
	♌ Virginis	15.4	29.0	42.5	56.1	9.5	16 42.50	+ 0.80	2.02	+ 1.90	13 16 45.20
	♍ Bootis	33.0	47.2	1.3	15.2	29.3	47 1.20	+ 0.59	1.80	+ 1.91	13 47 3.70
May 1	♌ Coronæ borealis	22.7	37.6	52.5	7.5	22.5	27 52.56	+ 0.54	1.75	+ 1.92	15 27 55.02
	Sun 1 Limb .....	.....	.....	47.6	.....	.....	30 47.59	+ 0.65	.....	+ 2.01	2 30 50.25

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
May 1	Sun 2 Limb.....	31.6	.....	.....	.....	.....	32	59.16	+ 0.65	.....	+ 2.01	2 33 1.82
	Mars 1 Limb.....	.....	.....	46.5	.....	13.7	54	46.64	+ 0.69	.....	+ 2.08	10 54 49.41
	Mars 2 Limb.....	.....	.....	.....	0.8	.....	54	47.34	+ 0.69	.....	+ 2.08	10 54 50.11
	δ Leonis.....	3.4	17.5	31.6	45.8	0.1	5	31.68	+ 0.60	+ 2.04	+ 2.08	11 5 34.36
	β Leonis.....	22.2	35.9	.....	3.8	17.7	40	49.90	+ 0.64	2.11	+ 2.08	11 40 52.62
May 2	Sun 1 Limb.....	.....	22.4	36.2	49.8	3.7	34	36.12	+ 0.65	.....	+ 2.34	2 34 39.11
	Sun 2 Limb.....	20.2	34.2	48.1	1.7	15.6	36	47.96	+ 0.65	.....	+ 2.34	2 36 50.95
	ε Hydræ.....	46.0	59.4	12.6	26.0	39.4	38	12.68	+ 0.72	+ 2.36	+ 2.44	8 38 15.84
	α Hydræ.....	11.5	24.8	38.4	51.7	5.5	19	38.38	+ 0.82	2.39	+ 2.45	9 19 41.65
	ε Leonis.....	11.4	26.0	40.6	55.3	9.8	36	40.62	+ 0.58	2.46	+ 2.46	9 36 43.66
	α Leonis.....	18.6	32.4	45.8	59.4	13.3	59	45.90	+ 0.67	2.47	+ 2.46	9 59 49.03
	Mars 1 Limb.....	.....	54.8	.....	21.7	.....	55	8.25	+ 0.70	.....	+ 2.47	10 55 11.42
	Mars 2 Limb.....	42.1	.....	8.8	.....	35.5	55	8.80	+ 0.70	.....	+ 2.47	10 55 11.97
	δ Leonis.....	2.5	16.8	31.1	45.4	59.6	5	31.08	+ 0.61	2.62	+ 2.47	11 5 34.16
	Jupiter 1 Limb.....	26.4	.....	53.1	.....	19.5	40	53.00	+ 0.78	.....	+ 2.47	12 40 56.25
	Jupiter 2 Limb.....	.....	42.8	.....	9.2	.....	40	56.00	+ 0.78	.....	+ 2.47	12 40 59.25
	Pallas.....	7.1	21.4	35.7	49.9	4.3	51	35.68	+ 0.61	.....	+ 2.48	12 51 38.77
	α Ursæ Minoris S. P.	19.0	.....	39.5	55.0	9.0	0	42.80	+ 10.98	.....	+ 2.48	.....
	Ceres.....	21.1	34.5	47.8	1.4	14.6	2	47.88	+ 0.70	.....	+ 2.48	13 2 51.06
May 3	ε Leonis.....	11.4	25.7	40.5	55.1	9.7	36	40.48	+ 0.58	+ 2.58	+ 2.58	.....
May 6	Mars 1 Limb.....	31.0	.....	57.8	.....	24.6	56	57.80	+ 0.64	.....	+ 2.98	10 57 1.42
	Mars 2 Limb.....	.....	45.0	.....	11.8	.....	58	58.40	+ 0.64	.....	+ 2.98	10 57 2.02
	δ Leonis.....	2.0	16.4	30.6	44.8	59.3	5	30.62	+ 0.57	+ 3.07	+ 2.98	11 5 34.17
	δ Hydræ & Crateris...	48.2	1.7	15.4	39.4	52.8	11	15.50	+ 0.78	3.03	+ 2.98	11 11 19.26
	79 Leonis.....	.....	31.3	44.6	58.0	.....	15	44.63	+ 0.68	.....	+ 2.98	11 15 48.29
	.....	17.5	.....	.....	.....	10.5	.....	44.00	+ 0.68	.....	.....	.....†
	β Leonis.....	21.6	35.6	49.4	3.2	16.8	40	49.32	+ 0.60	2.69	+ 2.99	11 40 52.91
	Jupiter 1 Limb.....	5.1	.....	31.7	.....	58.4	39	31.73	+ 0.71	.....	+ 3.00	12 39 35.44
	Jupiter 2 Limb.....	.....	21.1	.....	47.8	.....	39	34.45	+ 0.71	.....	+ 3.00	12 39 38.16
	Pallas.....	37.5	51.8	6.4	20.7	35.2	50	6.32	+ 0.57	.....	+ 3.00	12 50 9.89
	Ceres.....	57.4	10.7	24.2	37.6	51.0	0	24.18	+ 0.64	.....	+ 3.00	13 0 27.82
	α Ursæ Minoris S. P.	22.5	37.0	.....	58.0	.....	0	46.77	+ 8.32	.....	+ 3.00	.....
	α Virginis.....	14.5	28.0	41.5	55.1	8.6	16	41.54	+ 0.75	3.03	+ 3.01	13 16 45.30
	η Bootis.....	31.7	46.0	59.9	13.8	28.1	46	59.90	+ 0.58	3.12	+ 3.01	13 47 3.49
	Moon 2 Limb.....	25.7	40.4	54.5	8.8	23.1	49	54.50	+ 0.88	.....	+ 3.14	21 49 58.52
	α Ursæ Minoris.....	40.0	50.5	2.5	16.0	26.0	1	3.00	- 7.89	.....	+ 3.19	1 0 58.30
May 7	Sun 1 Limb.....	19.6	33.7	47.6	1.6	15.4	53	47.58	+ 0.64	.....	+ 3.22	2 53 51.44
	Sun 2 Limb.....	32.5	46.6	0.5	14.4	28.2	56	0.44	+ 0.64	.....	+ 3.22	2 56 4.30
	α Tauri.....	9.5	23.6	37.6	51.4	5.1	26	37.44	+ 0.64	+ 3.14	+ 3.24	4 26 41.32
	α Aurigæ.....	6.4	25.4	44.4	3.5	22.6	4	44.46	+ 0.42	3.30	+ 3.25	5 4 48.13
	Venus 1 Limb.....	26.7	41.1	55.9	10.5	25.2	13	55.88	+ 0.59	.....	+ 3.25	5 13 59.72
	β Tauri.....	33.3	48.3	3.3	18.5	33.6	16	3.40	+ 0.57	3.19	+ 3.25	5 16 7.22
	α Orionis.....	56.5	10.1	23.6	36.8	50.4	46	23.48	+ 0.70	3.37	+ 3.26	5 46 27.44
	Mars 1 Limb.....	.....	17.4	.....	44.2	.....	57	30.80	+ 0.69	.....	+ 3.32	10 57 34.81
	Mars 2 Limb.....	4.5	.....	31.4	.....	58.4	57	31.43	+ 0.69	.....	+ 3.32	10 57 35.44
	δ Leonis.....	1.6	16.0	30.1	44.7	58.8	5	30.30	+ 0.61	3.34	+ 3.32	11 5 34.23
	79 Leonis.....	17.7	.....	.....	.....	11.0	15	44.35	+ 0.73	.....	+ 3.32	11 15 48.40
	.....	.....	30.5	44.0	57.2	.....	.....	43.90	+ 0.73	.....	.....	.....†
	Jupiter 1 Limb.....	.....	59.3	.....	25.8	.....	39	12.55	+ 0.76	.....	+ 3.34	12 39 16.65
	Jupiter 2 Limb.....	48.7	.....	15.4	.....	41.9	39	15.33	+ 0.76	.....	+ 3.34	12 39 19.43
	Pallas.....	18.7	32.9	47.2	1.6	15.7	49	47.22	+ 0.61	.....	+ 3.34	12 49 51.17
	Ceres.....	24.5	37.7	51.2	4.5	18.1	59	51.20	+ 0.69	.....	+ 3.34	12 59 55.23
	α Ursæ Minoris S. P.	22.5	34.0	.....	59.0	9.0	0	46.08	+ 9.11	.....	+ 3.34	13 0 58.53

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
May 9	α Leonis	17.2	30.6	44.2	57.8	11.6	59 44.28	+ 0.76	+ 3.91	+ 3.81	9 59 48.85
	Mars 1 Limb	16.5	.....	43.2	.....	10.1	58 43.27	+ 0.79	.....	+ 3.82	10 58 47.88
	Mars 2 Limb .....	.....	30.6	.....	57.4	.....	58 44.00	+ 0.79	.....	+ 3.82	10 58 48.61
	δ Leonis	0.8	15.4	29.7	43.8	58.1	5 29.56	+ 0.70	3.97	+ 3.83	11 5 34.09
	δ Hydræ & Crateris...	47.4	0.8	14.5	28.2	41.8	11 14.54	+ 0.96	3.78	+ 3.83	11 11 19.33
	A. S. C. 1367	12.0	.....	.....	.....	5.2	35 38.60	+ 0.89	.....	.....	.....†
	.....	.....	25.4	38.7	52.3	.....	38.80	+ 0.89	.....	+ 3.83	11 35 43.52
	β Leonis	20.4	34.2	48.1	1.7	15.5	40 47.98	+ 0.74	3.87	+ 3.83	11 40 52.55
	Jupiter 1 Limb	9.1	.....	35.8	.....	2.4	38 35.77	+ 0.87	.....	+ 3.85	12 38 40.49
	Jupiter 2 Limb .....	.....	25.3	.....	51.8	.....	38 38.55	+ 0.87	.....	+ 3.85	12 38 43.27
	Ceres	22.5	35.7	49.2	2.6	15.8	58 49.16	+ 0.79	.....	+ 3.86	12 58 53.81
	α Ursæ Minoris S. P.	21.0	35.0	44.5	56.0	9.0	0 45.10	+ 11.07	.....	+ 3.86	.....
	η Bootis	31.2	45.3	59.2	13.3	27.4	46 59.28	+ 0.71	3.62	+ 3.87	13 47 3.86
	α Ursæ Minoris .....	.....	.....	.....	.....	24.0	1 1.00	- 7.84	.....	+ 4.07	1 0 57.23
May 10	Sun 1 Limb	57.1	.....	.....	.....	52.8	5 24.95	+ 0.68	.....	+ 4.11	3 5 29.74
	Sun 2 Limb .....	.....	24.2	38.2	52.2	6.3	7 38.24	+ 0.68	.....	+ 4.11	3 7 43.03
	α Tauri	8.8	22.6	36.4	50.1	4.1	26 36.40	+ 0.69	+ 4.14	+ 4.13	4 26 41.22
	α Aurigæ	5.3	24.2	43.5	2.5	21.6	4 43.42	+ 0.47	4.27	+ 4.14	5 4 48.03
	β Tauri	32.2	47.4	2.4	17.6	32.7	16 2.46	+ 0.62	4.07	+ 4.15	5 16 7.23
	Venus 1 Limb	5.0	19.8	34.6	49.1	3.8	29 34.46	+ 0.63	.....	+ 4.15	5 29 39.24
	α Orionis	55.9	9.4	22.7	36.1	49.5	46 22.72	+ 0.75	4.07	+ 4.16	5 46 27.63
	β Leonis	20.1	33.7	47.6	1.4	15.2	40 47.60	+ 0.70	4.28	+ 4.18	11 40 52.48
	A. S. C. 1393	15.8	.....	.....	.....	9.0	57 42.40	+ 0.80	.....	+ 4.18	11 57 47.38
	.....	.....	28.5	42.0	55.2	.....	41.90	+ 0.80	.....	.....	.....†
	Jupiter 1 Limb .....	.....	4.8	.....	31.4	.....	38 18.10	+ 0.80	.....	+ 4.18	12 38 23.08
	Jupiter 2 Limb	54.6	.....	21.0	.....	47.8	38 21.13	+ 0.80	.....	+ 4.18	12 38 26.11
	Pallas	29.4	43.7	58.0	12.2	26.6	48 57.98	+ 0.66	.....	+ 4.18	12 49 2.82
	Ceres	53.4	6.7	20.2	33.7	47.1	58 20.22	+ 0.74	.....	+ 5.18	12 58 25.14
	α Ursæ Minoris S. P.	21.0	33.5	45.5	54.5	5.0	0 43.90	+ 9.16	.....	+ 4.18	13 0 57.24
May 11	Sun 1 Limb	50.8	4.9	18.8	32.9	46.8	9 18.84	+ 0.84	.....	+ 4.19	3 9 23.87
	Sun 2 Limb	4.4	18.2	32.2	46.2	0.2	11 32.24	+ 0.84	.....	+ 4.19	3 11 37.27
	Venus 1 Limb	18.5	33.4	48.0	2.6	17.4	34 47.98	+ 0.77	.....	+ 4.19	5 34 52.94
	Mars 1 Limb .....	.....	51.1	.....	17.8	.....	0 4.45	+ 0.92	.....	+ 4.20	11 0 9.57
	Mars 2 Limb	38.8	.....	5.4	.....	32.0	0 5.40	+ 0.92	.....	+ 4.20	11 0 10.52
	δ Leonis	0.5	14.8	29.1	43.4	57.6	5 29.08	+ 0.81	+ 4.32	+ 4.20	11 5 34.09
	δ Hydræ & Crateris...	46.7	0.3	13.8	27.5	41.4	11 13.94	+ 1.14	4.18	+ 4.20	11 11 19.28
	β Leonis	19.8	33.6	47.5	1.2	15.0	40 47.42	+ 0.86	4.29	+ 4.20	11 40 52.48
	A. S. C. 1432	6.0	.....	.....	.....	59.1	19 32.55	+ 1.04	.....	.....	.....†
	.....	.....	19.8	33.0	46.3	.....	33.03	+ 1.04	.....	+ 4.20	12 19 38.27
	Jupiter 1 Limb	34.5	.....	1.2	.....	27.2	38 0.97	+ 1.02	.....	+ 4.20	12 38 6.19
	Jupiter 2 Limb .....	.....	50.8	.....	17.3	.....	38 4.05	+ 1.02	.....	+ 4.20	12 38 9.27
	Pallas	15.6	29.8	44.2	58.6	13.0	48 44.24	+ 0.80	.....	+ 4.21	12 48 49.25
	Ceres	25.7	39.2	52.6	5.8	19.3	57 52.52	+ 0.93	.....	+ 4.21	12 57 57.66
	α Ursæ Minoris S. P.	19.0	28.5	43.0	53.5	2.0	0 41.20	+ 15.28	.....	+ 4.21	.....
May 13	η Bootis	30.5	44.6	58.7	12.8	26.8	46 58.68	+ 0.83	4.10	+ 4.22	13 47 3.73
	α Bootis	48.6	2.7	16.7	30.9	45.0	8 16.78	+ 0.82	4.11	+ 4.23	14 8 21.83
	α Leonis	15.9	29.6	43.1	56.8	10.4	59 43.16	+ 0.72	+ 5.03	+ 4.92	9 59 48.80
	Mars 1 Limb	7.1	.....	34.0	.....	0.8	1 33.97	+ 0.76	.....	+ 4.93	11 1 39.66
	Mars 2 Limb .....	.....	21.2	.....	48.2	.....	1 34.70	+ 0.76	.....	+ 4.93	11 1 40.39
	δ Leonis	59.9	14.3	28.6	42.8	57.1	5 28.54	+ 0.66	4.99	+ 4.93	11 5 34.13
	δ Hydræ & Crateris ..	46.0	59.7	13.4	27.0	40.7	11 13.36	+ 0.94	4.94	+ 4.94	11 11 19.24
	Jupiter 1 Limb .....	.....	15.6	.....	42.2	.....	37 28.90	+ 0.83	.....	+ 4.95	12 37 34.68
	Jupiter 2 Limb	5.2	.....	.....	.....	58.5	37 31.85	+ 0.83	.....	+ 4.95	12 37 37.63
	Pallas	52.2	6.5	21.1	35.5	49.8	48 21.02	+ 0.65	.....	+ 4.95	12 48 26.62

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpo- lated.			
May 13	Ceres.....	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>m.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>h.</i>	<i>m.</i>	<i>s.</i>
	α Ursæ Minoris S. P.	21.5	34.5	44.0	55.5	8.0	0	44.70	+ 0.76	.....	+ 4.95	12	57	6.91
	η Bootis.....	29.8	44.0	58.1	12.2	26.2	46	58.06	+ 12.15	.....	+ 4.95	.....	.....	.....
	α Bootis.....	47.9	2.1	16.1	30.2	44.4	8	16.14	+ 0.67	+ 4.88	+ 4.96	13	47	3.69
	Groomb. 642 S. P.	33.5	50.5	6.5	23.0	39.0	14	6.50	+ 0.67	4.90	+ 4.96	14	8	21.77
	Groombridge 2283 ...	29.5	21.5	.....	4.0	54.5	33	12.40	+ 5.26	.....	+ 4.96	15	14	16.72
	Groomb. 750 S. P.	28.0	.....	40.0	16.0	52.0	47	39.95	- 7.51	.....	+ 4.96	15	33	9.85
	Saturn 1 Limb Ring	17.0	.....	45.1	.....	13.2	26	45.10	+ 4.32	.....	+ 4.96	15	47	49.23
	Saturn 2 Limb Ring	.....	33.9	.....	2.2	.....	26	48.05	+ 0.99	.....	+ 4.96	16	26	51.05
									+ 0.99	.....	+ 4.96	16	26	54.00
May 14	α Aurigæ.....	4.6	23.7	42.7	1.8	20.8	4	42.72						
	α Leonis.....	15.8	29.4	43.0	56.7	10.3	59	43.04	+ 0.42	+ 5.03	+ 5.00	5	4	48.14
	α Bootis.....	47.8	1.8	16.1	30.2	44.5	8	16.08	+ 0.75	5.11	+ 5.02	9	59	48.81
	ϵ Bootis.....	24.4	39.4	54.4	9.5	24.4	37	54.42	+ 0.69	4.94	+ 5.00	14	8	21.77
	α^2 Libræ.....	27.8	41.6	55.3	9.2	22.8	41	55.34	+ 0.63	4.94	+ 5.00	14	38	0.05
	Groomb. 642 S. P.	34.0	50.5	6.5	24.5	40.0	14	7.10	+ 1.00	5.09	+ 5.00	14	42	1.34
	Groombridge 2283 ...	30.0	21.0	12.0	4.5	55.0	33	12.50	+ 5.89	.....	+ 4.99	15	14	17.98
	Groomb. 750 S. P.	27.5	.....	39.5	16.0	53.0	47	39.95	- 8.53	.....	+ 4.99	15	33	8.96
	Saturn 1 Limb Ring	.....	13.2	.....	41.4	.....	26	27.30	+ 4.83	.....	+ 4.99	15	47	49.77
	Saturn 2 Limb Ring	2.0	.....	30.2	.....	58.3	26	30.17	+ 1.05	.....	+ 4.98	16	26	33.33
May 16									+ 1.05	.....	+ 4.98	16	26	36.20
	Mars 1 Limb.....	37.4	.....	4.2	.....	31.0	4	4.20						
	Mars 2 Limb.....	.....	51.6	.....	18.3	.....	4	4.95	+ 0.83	.....	+ 4.65	11	4	9.68
	δ Hydræ & Crateris...	46.1	59.8	13.5	27.1	40.8	11	13.46	+ 0.83	.....	+ 4.65	11	4	10.43
	β Leonis.....	19.5	33.3	47.0	0.8	14.5	40	47.02	+ 1.03	+ 4.72	+ 4.65	11	11	19.14
	Jupiter 1 Limb.....	20.0	.....	46.1	.....	12.9	36	46.33	+ 0.76	4.75	+ 4.64	11	40	52.42
	Jupiter 2 Limb.....	.....	35.7	.....	2.5	.....	36	49.10	+ 0.92	.....	+ 4.64	12	36	51.89
	Pallas.....	29.2	43.6	57.9	12.2	26.6	47	57.90	+ 0.92	.....	+ 4.64	12	36	54.66
	Groomb. 195 S. P.	21.5	.....	10.0	34.5	0.0	50	10.28	+ 0.69	.....	+ 4.63	12	48	3.22
	Ceres.....	29.0	42.5	55.8	9.2	22.6	55	55.82	+ 6.62	.....	+ 4.63	12	50	21.53
	α Ursæ Minoris S. P.	21.0	33.0	44.5	54.5	7.5	0	44.10	+ 0.83	.....	+ 4.63	12	56	1.28
	A. S. C. 1614.....	37.5	.....	.....	.....	30.7	4	4.10	+ 14.81	.....	+ 4.63	.....	.....	.....
		.....	50.0	3.3	17.0	.....	.....	3.43	+ 0.87	.....	+ 4.64	14	4	9.61
	α Bootis.....	48.2	2.2	16.3	30.5	44.7	8	16.38	+ 0.87	.....	.....	.....	.....	.....†
	ϵ Bootis.....	24.6	39.7	54.8	9.8	24.8	37	54.74	+ 0.72	4.61	+ 4.64	14	8	21.74
	α^2 Libræ.....	28.4	42.1	55.9	9.7	23.5	41	55.92	+ 0.65	4.60	+ 4.64	14	38	0.03
	Groomb. 642 S. P.	33.5	50.0	6.0	23.0	39.0	14	6.30	+ 1.04	4.49	+ 4.64	14	42	1.60
	Groombridge 2283 ...	31.0	22.0	15.0	5.5	.....	33	13.98	+ 6.37	.....	+ 4.65	15	14	17.32
	Groomb. 750 S. P.	27.0	3.5	39.0	15.0	52.0	47	39.30	- 9.28	.....	+ 4.65	15	33	9.35
	Saturn 1 Limb Ring	23.8	.....	52.0	.....	20.3	25	52.03	+ 5.22	.....	+ 4.65	15	47	49.17
	Saturn 2 Limb Ring	.....	40.9	.....	9.1	.....	25	55.00	+ 1.10	.....	+ 4.66	16	25	57.79
									+ 1.10	.....	+ 4.66	16	26	0.76
May 17	Sun 1 Limb.....	26.2	40.4	54.6	8.5	22.5	32	54.44						
	Sun 2 Limb.....	40.6	54.8	9.0	23.1	37.3	35	8.96	+ 0.73	.....	+ 4.77	3	32	59.94
May 20									+ 0.73	.....	+ 4.77	3	35	14.46
	Sun 1 Limb.....	20.8	35.1	49.3	3.6	17.8	44	49.32						
	Sun 2 Limb.....	35.9	50.0	4.1	18.2	32.5	47	4.14	+ 0.54	.....	+ 5.45	3	44	55.31
	α Orionis.....	54.6	7.8	21.4	34.7	48.1	46	21.32	+ 0.54	.....	+ 5.45	3	47	10.13
	δ Leonis.....	59.2	13.6	27.8	42.2	56.5	5	27.86	+ 0.64	+ 5.56	+ 5.47	5	46	27.43
	Mars 1 Limb.....	.....	36.3	.....	3.1	.....	7	49.70	+ 0.53	5.72	+ 5.52	11	5	33.91
	Mars 2 Limb.....	23.4	.....	50.2	.....	17.0	7	50.20	+ 0.64	.....	+ 5.52	11	7	55.86
	Jupiter 1 Limb.....	.....	43.4	.....	10.1	.....	35	56.75	+ 0.64	.....	+ 5.52	11	7	56.36
	Jupiter 2 Limb.....	32.9	.....	59.5	.....	26.1	35	59.50	+ 0.69	.....	+ 5.56	12	36	3.00
	α Ursæ Minoris S. P.	29.0	39.0	50.5	0.5	9.5	0	49.70	+ 0.69	.....	+ 5.56	12	36	5.75
	η Bootis.....	29.5	43.6	57.7	11.7	25.7	46	57.61	+ 10.53	.....	+ 5.57	.....	.....	.....
	α Bootis.....	47.4	1.6	15.7	29.8	43.9	8	15.68	+ 0.55	5.42	+ 5.60	13	47	3.79
									+ 0.54	5.50	+ 5.62	14	8	21.84

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
May 20	ϵ Bootis	24.0	39.0	54.1	9.1	24.0	37 54.04	+ 0.49	+ 5.47	+ 5.63	14 38 0.16
May 21	INSTRUMENT REVERSED.										
	Mars 1 Limb	23.9	.....	50.6	.....	17.4	8 50.63	+ 0.20	.....	+ 6.41	11 8 57.24
	Mars 2 Limb .....	.....	37.8	.....	4.6	.....	8 51.20	+ 0.20	.....	+ 6.41	11 8 57.81
	Moon 1 Limb	36.6	50.2	3.8	17.4	31.1	13 3.82	+ 0.22	.....	+ 6.42	11 13 10.46
	η Bootis	28.8	42.8	57.0	11.0	25.1	46 56.94	+ 0.14	+ 6.53	+ 6.51	13 47 3.59
	α Bootis	46.7	1.0	15.0	29.2	43.5	8 15.08	+ 0.14	6.50	+ 6.53	14 8 21.75
	α Coronæ borealis ...	18.5	33.2	48.5	3.2	18.3	27 48.34	+ 0.09	6.62	+ 6.55	15 27 54.98
	α Serpentis	49.6	3.0	16.4	29.6	43.1	36 16.34	+ 0.20	6.55	+ 6.55	15 36 23.09
May 22	Mars 1 Limb .....	.....	.....	52.8	.....	19.7	9 52.88	+ 0.22	.....	+ 6.64	11 9 59.74
	Mars 2 Limb .....	.....	.....	.....	6.7	.....	9 53.31	+ 0.22	.....	+ 6.64	11 10 0.17
	Moon 1 Limb	58.6	12.2	25.7	39.2	52.8	56 25.70	+ 0.28	.....	+ 6.64	11 56 32.62
	η Virginis	9.0	22.2	35.5	48.7	2.1	11 35.50	+ 0.26	.....	+ 6.64	12 11 42.40
	21 Virginis	56.7	10.3	23.7	37.1	50.6	25 23.68	+ 0.30	.....	+ 6.64	12 25 30.62
	Jupiter 1 Limb	9.4	.....	35.8	.....	2.4	35 35.87	+ 0.28	.....	+ 6.64	12 35 42.79
	Jupiter 2 Limb .....	.....	25.5	.....	51.9	.....	35 38.70	+ 0.28	.....	+ 6.64	12 35 45.62
	Pallas	19.2	33.7	48.1	2.6	16.8	47 48.08	+ 0.14	.....	+ 6.64	12 47 54.86
	Groomb. 195 S. P. ...	22.0	.....	12.0	.....	2.0	50 11.93	+ 6.89	.....	+ 6.64	12 50 25.46
	Ceres	55.7	9.0	22.4	35.8	49.0	54 22.38	+ 0.23	.....	+ 6.64	12 54 29.25
	α Ursæ Minoris S. P. ...	22.5	33.5	44.5	55.5	.....	0 44.62	+ 15.94	.....	+ 6.65	.....
	α Virginis	11.5	24.9	38.5	52.2	5.2	16 38.46	+ 0.31	+ 6.54	+ 6.65	13 16 45.42
	η Bootis	28.7	42.6	56.8	10.8	25.0	46 56.78	+ 0.16	6.67	+ 6.65	13 47 3.59
	α Bootis	46.6	0.8	14.8	29.0	43.2	8 14.88	+ 0.16	6.68	+ 6.65	14 8 21.69
	ϵ Bootis	23.3	38.2	53.4	8.4	23.3	37 53.32	+ 0.11	6.57	+ 6.65	14 38 0.08
	α^2 Libræ	26.7	40.6	54.4	8.2	22.0	41 54.38	+ 0.33	6.77	+ 6.65	14 42 1.36
	Groomb. 642 S. P. ...	36.0	52.5	9.0	25.0	41.5	14 8.80	+ 6.61	.....	+ 6.66	15 14 22.07
	Groombridge 2283 ...	24.5	15.5	6.0	57.0	49.5	33 6.50	- 10.69	.....	+ 6.66	15 33 2.47
	Groomb. 750 S. P. ...	29.0	.....	41.0	17.0	53.0	47 40.95	+ 5.34	.....	+ 6.66	15 47 52.95
	Saturn 1 Limb Ring ..	33.1	.....	1.5	.....	29.8	24 1.47	+ 0.34	.....	+ 6.66	16 24 8.47
	Saturn 2 Limb Ring ..	.....	50.2	.....	18.5	.....	24 4.35	+ 0.34	.....	+ 6.66	16 24 11.35
	Mercury 2 Limb .....	.....	29.3	42.5	56.1	9.6	22 42.61	+ 0.24	.....	+ 6.71	2 22 49.56
May 23	δ Leonis	58.7	13.0	27.2	41.5	55.8	5 27.24	+ 0.17	+ 6.67	+ 6.76	11 5 34.17
	Mars 1 Limb .....	.....	43.2	.....	10.0	.....	10 56.60	+ 0.26	.....	+ 6.76	11 11 3.62
	Mars 2 Limb	30.5	.....	57.3	.....	23.8	10 57.20	+ 0.26	.....	+ 6.76	11 11 4.22
	β Leonis	18.1	31.8	45.6	59.5	13.3	40 45.66	+ 0.21	6.59	+ 6.76	11 40 52.63
	η Virginis	8.6	21.8	35.2	48.4	1.7	11 35.14	+ 0.29	.....	+ 6.77	12 11 42.20
	21 Virginis	56.6	10.0	23.6	36.8	50.4	25 23.48	+ 0.34	.....	+ 6.77	12 25 30.59
	Jupiter 1 Limb .....	.....	13.1	.....	39.5	.....	35 26.30	+ 0.31	.....	+ 6.77	12 35 33.38
	Jupiter 2 Limb	2.4	.....	29.1	.....	55.6	35 29.03	+ 0.31	.....	+ 6.77	12 35 36.11
	Moon 1 Limb	58.5	12.2	25.5	39.3	53.1	39 25.72	+ 0.33	.....	+ 6.77	12 39 32.82
	Pallas	22.7	36.9	51.2	5.6	20.2	47 51.32	+ 0.17	.....	+ 6.77	12 47 58.26
	Groomb. 195 S. P. ...	22.0	.....	11.5	.....	3.0	50 12.10	+ 7.22	.....	+ 6.77	12 50 26.09
	Ceres	44.7	58.3	11.8	25.2	38.5	54 11.70	+ 0.26	.....	+ 6.77	12 54 18.73
	α Ursæ Minoris S. P. ...	21.5	31.5	.....	56.0	.....	0 43.93	+ 16.71	.....	+ 6.77	.....
	θ Virginis	5.6	18.8	32.2	45.6	58.8	1 32.20	+ 0.32	.....	+ 6.77	13 1 39.29
	α Virginis	11.1	24.5	38.0	51.5	5.1	16 38.04	+ 0.34	6.92	+ 6.77	13 16 45.15
	η Bootis	28.4	42.6	56.8	10.8	24.7	46 56.66	+ 0.19	6.75	+ 6.78	13 47 3.63
	α Bootis	46.3	0.5	14.6	28.8	42.9	8 14.62	+ 0.18	6.92	+ 6.78	14 8 21.58
May 24	Sun 1 Limb	21.7	35.8	50.2	4.4	.....	0 50.14	+ 0.16	.....	+ 6.86	4 0 57.16
	Sun 2 Limb .....	.....	51.3	.....	.....	.....	3 5.53	+ 0.16	.....	+ 6.86	4 3 12.55
	δ Leonis	58.6	12.7	27.1	41.4	55.6	5 27.08	+ 0.16	+ 6.82	+ 6.90	11 5 34.14
	Mars 1 Limb .....	.....	49.0	.....	15.7	.....	12 2.35	+ 0.25	.....	+ 6.90	11 12 9.50

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpo- lated.			
May 24	Mars 2 Limb	36.3	.....	2.8	.....	29.6	12	2.90	+ 0.25	.....	+ 6.90	h. m. s.	11 12 10.05	
	β Leonis	18.0	31.7	45.6	59.3	13.2	40	45.56	+ 0.20	+ 6.69	+ 6.90		11 40 52.66	
	Jupiter 1 Limb	50.8	.....	17.8	.....	44.3	35	17.63	+ 0.30	.....	+ 6.91		12 35 24.84	
	Jupiter 2 Limb .....	.....	6.8	.....	33.6	.....	35	20.20	+ 0.30	.....	+ 6.91		12 35 27.41	
	Pallas	27.2	41.7	56.1	10.5	24.8	47	56.06	+ 0.16	.....	+ 6.91		12 48 3.13	
	Groomb. 195 S. P.	21.0	.....	11.5	.....	1.0	50	11.10	+ 7.21	.....	+ 6.91		12 50 25.22	
	Ceres	36.3	49.6	2.7	16.4	29.7	54	2.94	+ 0.25	.....	+ 6.91		12 54 10.10	
	α Ursæ Minoris S. P. .	22.0	34.0	.....	55.5	.....	0	44.73	+ 16.70	.....	+ 6.91		.....
	θ Virginis	5.5	18.8	32.1	45.5	58.7	1	32.12	+ 0.31	.....	+ 6.91		13 1 39.34	
	α Virginis	10.8	24.5	37.8	51.4	5.0	16	37.90	+ 0.33	7.07	+ 6.91		13 16 45.14	
	Moon 1 Limb	46.2	0.1	14.0	28.0	42.0	23	14.06	+ 0.35	.....	+ 6.91		13 23 21.32	
	η Bootis	28.4	42.4	56.6	10.6	24.5	46	56.50	+ 0.18	6.92	+ 6.91		13 47 3.59	
	α Bootis	46.2	0.4	14.5	28.7	42.7	8	14.50	+ 0.17	7.04	+ 6.92		14 8 21.59	
	Groomb. 642 S. P.	33.5	52.0	8.0	24.5	41.0	14	7.80	+ 6.93	.....	+ 6.92		15 14 21.65	
	Groomb. 750 S. P.	28.5	3.5	40.0	16.5	53.0	47	40.30	+ 5.59	.....	+ 6.92		15 47 52.81	
	Saturn 1 Limb Ring..	.....	10.2	.....	38.3	.....	23	24.25	+ 0.37	.....	+ 6.92		16 23 31.54	
	Saturn 2 Limb Ring..	59.3	.....	27.3	.....	55.5	23	27.37	+ 0.37	.....	+ 6.92		16 23 34.66	
May 25	Sun 1 Limb	23.1	37.5	51.5	5.9	20.1	4	51.62	+ 0.26	.....	+ 6.97		4 4 58.85	
	Sun 2 Limb	38.6	53.0	7.2	21.6	35.7	7	7.22	+ 0.26	.....	+ 6.97		4 7 14.45	
	Venus 1 Limb	10.2	24.8	39.4	54.1	9.0	47	39.50	+ 0.23	.....	+ 6.98		6 47 46.71	
	α Canis Minoris	18.6	31.8	45.1	58.5	12.0	30	45.20	+ 0.38	+ 7.03	+ 6.99		7 30 52.57	
	β Geminorum	50.6	5.6	20.7	35.8	51.0	35	20.74	+ 0.20	6.99	+ 6.99		7 35 27.93	
	α Leonis	14.3	28.0	41.7	55.2	8.7	59	41.58	+ 0.34	6.86	+ 7.00		9 59 48.92	
	δ Leonis	58.4	12.6	26.8	41.1	55.4	5	26.86	+ 0.26	6.93	+ 7.00		11 5 34.12	
	Mars 1 Limb	42.7	.....	9.5	.....	36.3	13	9.50	+ 0.37	.....	+ 7.00		11 13 16.87	
	Mars 2 Limb .....	.....	56.6	.....	23.5	.....	13	10.05	+ 0.37	.....	+ 7.00		11 13 17.42	
	β Leonis	17.6	31.4	45.3	59.1	12.7	40	45.22	+ 0.31	6.91	+ 7.01		11 40 52.54	
	Jupiter 1 Limb .....	.....	55.2	.....	21.5	.....	35	8.35	+ 0.44	.....	+ 7.02		12 35 15.81	
	Jupiter 2 Limb	45.4	.....	11.8	.....	38.4	35	11.87	+ 0.44	.....	+ 7.02		12 35 19.33	
	Pallas	33.2	47.6	2.0	16.5	30.7	48	2.00	+ 0.25	.....	+ 7.02		12 48 9.27	
	Groomb. 195 S. P.	20.5	.....	10.0	.....	59.5	50	9.93	+ 8.89	.....	+ 7.02		12 50 25.84	
	Ceres	28.4	41.8	55.2	8.6	21.8	53	55.16	+ 0.38	.....	+ 7.02		12 54 2.56	
	α Ursæ Minoris S. P. .	20.5	29.5	41.0	52.0	4.0	0	41.40	+ 20.54	.....	+ 7.02		.....
	η Virginis	34.7	48.6	2.5	16.4	30.4	41	2.52	+ 0.53	.....	+ 7.03		13 41 10.08	
	η Bootis	27.8	42.0	56.1	10.2	24.4	46	56.10	+ 0.28	7.21	+ 7.03		13 47 3.41	
	Moon 1 Limb	24.2	38.9	53.2	7.3	21.6	8	53.04	+ 0.54	.....	+ 7.03		14 9 0.61	
	α^2 Libræ	26.6	40.0	53.7	7.6	21.5	41	53.88	+ 0.52	7.10	+ 7.03		14 42 1.43	
May 26	Mercury 2 Limb	1.7	15.2	28.6	42.2	55.7	37	28.68	+ 0.26	.....	+ 7.37		2 37 36.31	
May 27	Sun 1 Limb	27.3	41.7	56.1	10.5	24.7	12	56.06	+ 0.18	.....	+ 7.38		4 13 3.62	
	Sun 2 Limb	43.4	57.5	11.8	26.2	40.7	15	11.92	+ 0.18	.....	+ 7.38		4 15 19.48	
	α Aurigæ	2.8	21.9	40.9	59.8	19.1	4	40.90	- 0.08	+ 7.41	+ 7.39		5 4 48.21	
	β Tauri	29.6	44.7	59.7	14.8	30.0	15	59.76	+ 0.13	7.31	+ 7.39		5 16 7.28	
	α Orionis	53.0	6.5	20.1	33.3	46.7	46	19.92	+ 0.28	7.34	+ 7.39		5 46 27.59	
	Venus 1 Limb	25.8	40.6	55.2	9.9	24.8	57	55.26	+ 0.16	.....	+ 7.40		6 58 2.82	
	δ Leonis	58.0	12.4	26.6	40.8	55.1	5	26.58	+ 0.18	7.27	+ 7.44		11 5 34.20	
	Mars 1 Limb	1.7	.....	28.4	.....	55.2	15	28.43	+ 0.28	.....	+ 7.44		11 15 36.15	
	Mars 2 Limb .....	.....	15.6	.....	42.4	.....	15	29.00	+ 0.28	.....	+ 7.44		11 15 36.72	
	ϵ Bootis	22.3	37.3	52.4	7.4	22.1	37	52.36	+ 0.14	7.50	+ 7.45		14 37 59.95	
	χ Libræ	12.4	26.8	41.1	55.5	10.0	30	41.16	+ 0.45	.....	+ 7.46		15 30 49.07	
	Groombridge 2283....	23.5	14.5	5.0	0.0	47.5	33	6.10	- 12.22	.....	+ 7.46		15 33 1.34	
	1 Scorpii	43.7	58.6	13.2	27.7	42.7	41	13.18	+ 0.46	.....	+ 7.46		15 41 21.10	
	Moon 1 Limb .....	.....	44.0	59.2	.....	29.2	49	59.09	+ 0.46	.....	+ 7.46		15 50 7.01	
	σ Scorpii	50.2	4.6	19.6	34.3	49.0	11	19.54	+ 0.46	.....	+ 7.46		16 11 27.46	
	α Scorpii	57.9	12.7	27.6	42.4	57.2	19	27.56	+ 0.46	7.74	+ 7.46		16 19 35.48	
	Saturn 1 Limb Ring..	59.2	.....	27.7	.....	56.1	22	27.67	+ 0.42	.....	+ 7.46		16 22.35.55	

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpolated.			
May 27	Saturn 2 Limb Ring.....	s.	s. 17.2	s.	s. 44.7	s.	m. 22	s. 30.95	+ 0.42	s.	+ 7.46	h. 16	m. 22	s. 38.83
	Mercury 2 Limb.....	13.7	27.2	40.5	54.2	7.7	41	40.66	+ 0.17	.....	+ 7.51	2	41	48.34
May 28	Sun 1 Limb.....	30.3	44.6	59.1	13.4	27.6	16	59.00	+ 0.12	.....	+ 7.52	4	17	6.64
	Sun 2 Limb.....	46.5	0.8	15.1	29.5	43.8	19	15.14	+ 0.12	.....	+ 7.52	4	19	22.78
	α Aurigæ.....	2.8	21.8	40.9	0.0	18.8	4	40.86	- 0.11	+ 7.49	+ 7.52	5	4	48.27
	Venus 1 Limb.....	.....	47.0	1.3	16.4	30.8	3	1.54	+ 0.10	.....	+ 7.53	7	3	9.17
	β Geminorum.....	50.2	5.3	20.4	35.6	50.6	35	20.42	+ 0.07	7.42	+ 7.54	7	35	28.03
	δ Leonis.....	57.9	12.2	26.5	40.7	55.0	5	26.46	+ 0.12	7.44	+ 7.55	11	5	34.13
	Mars 1 Limb.....	.....	26.8	.....	53.6	.....	16	40.20	+ 0.20	.....	+ 7.55	11	16	47.95
	Mars 2 Limb.....	13.9	.....	40.6	.....	7.4	16	40.63	+ 0.20	.....	+ 7.55	11	16	48.38
	Jupiter 1 Limb.....	22.0	.....	48.7	.....	15.2	34	48.63	+ 0.25	.....	+ 7.56	12	34	56.44
	Jupiter 2 Limb.....	.....	38.1	.....	4.7	.....	34	51.40	+ 0.25	.....	+ 7.56	12	34	59.21
	α Ursæ Minoris S. P.	23.0	35.5	48.5	58.5	10.5	0	47.20	+ 15.91	.....	+ 7.56	.....	.....	.....
	η Bootis.....	27.6	41.6	55.7	9.8	23.8	46	55.70	+ 0.13	7.75	+ 7.56	13	47	3.39
	α Bootis.....	45.6	59.8	14.0	28.1	42.2	8	13.94	+ 0.13	7.64	+ 7.56	14	8	21.63
May 29	Sun 1 Limb.....	33.7	48.1	2.5	16.8	31.2	21	2.46	+ 0.11	.....	+ 7.61	4	21	10.18
	Sun 2 Limb.....	50.0	4.3	18.7	33.1	47.6	23	18.74	+ 0.11	.....	+ 7.61	4	23	26.46
	α Aurigæ.....	2.6	21.7	40.8	59.8	18.8	4	40.74	- 0.10	+ 7.61	+ 7.62	5	4	48.26
	Venus 1 Limb.....	37.8	52.2	7.0	21.6	36.3	8	6.98	+ 0.10	.....	+ 7.62	7	8	14.70
	α Canis Minoris.....	18.0	31.4	44.7	58.0	11.5	30	44.72	+ 0.19	7.68	+ 7.62	7	30	52.53
	β Geminorum.....	50.1	5.2	20.3	35.4	50.5	35	20.30	+ 0.07	7.53	+ 7.63	7	35	28.00
	δ Leonis.....	57.7	12.0	26.4	40.6	54.7	5	26.28	+ 0.11	7.61	+ 7.66	11	5	34.05
	Mars 1 Limb.....	26.5	.....	53.1	.....	19.8	17	53.13	+ 0.19	.....	+ 7.66	11	18	0.98
	Mars 2 Limb.....	.....	40.4	.....	7.0	.....	17	53.70	+ 0.19	.....	+ 7.66	11	18	1.55
	α Ursæ Minoris S. P.	28.0	37.0	49.0	59.0	11.5	0	48.90	+ 15.16	.....	+ 7.68	.....	.....	.....
	η Bootis.....	27.7	41.7	55.7	9.7	23.8	46	55.72	+ 0.13	7.73	+ 7.69	13	47	3.54
	Mercury 2 Limb.....	.....	26.9	40.8	54.6	.....	50	40.77	+ 0.13	.....	+ 7.87	2	50	48.77
May 30	Sun 1 Limb.....	.....	51.7	6.1	20.5	35.1	25	6.18	+ 0.08	.....	+ 7.89	4	25	14.15
	Sun 2 Limb.....	53.7	8.2	22.6	36.8	51.3	27	22.52	+ 0.08	.....	+ 7.89	4	27	30.49
	α Aurigæ.....	2.2	21.3	40.5	59.6	8.7	4	40.46	- 0.11	+ 7.91	+ 7.90	5	4	48.25
	Venus 1 Limb.....	42.1	56.6	11.2	26.0	40.6	13	11.30	+ 0.07	.....	+ 7.93	7	13	19.30
	α Canis Minoris.....	17.8	31.1	44.5	57.8	11.2	30	44.48	+ 0.15	7.96	+ 7.93	7	30	52.56
	β Geminorum.....	49.6	4.7	19.8	35.0	50.2	35	19.86	+ 0.05	8.00	+ 7.93	7	35	27.84
	δ Leonis.....	57.5	11.7	25.8	40.2	54.5	5	25.94	+ 0.09	7.96	+ 7.96	11	5	33.99
	Mars 1 Limb.....	40.8	54.3	7.6	20.9	34.2	19	7.56	+ 0.15	.....	+ 7.96	11	19	15.67
	Jupiter 1 Limb.....	.....	24.7	.....	51.2	.....	34	37.95	+ 0.19	.....	+ 7.97	12	34	46.11
	Jupiter 2 Limb.....	13.9	.....	40.6	.....	7.2	34	40.57	+ 0.19	.....	+ 7.97	12	34	48.73
	12 Canum Venat.....	49.7	6.7	23.8	41.1	58.3	48	23.92	- 0.03	7.90	+ 7.97	12	48	31.86
	α Ursæ Minoris S. P.	27.5	39.5	50.5	1.5	12.5	0	50.30	+ 14.01	.....	+ 7.97	.....	.....	.....
May 31	Venus 1 Limb.....	45.4	0.0	14.5	29.2	43.8	18	14.58	+ 0.15	.....	+ 8.05	7	18	22.78
	α Canis Minoris.....	17.7	30.8	.....	57.7	11.0	30	44.30	+ 0.26	+ 8.02	+ 8.05	7	30	52.61
	δ Leonis.....	57.2	11.4	25.7	40.0	54.2	5	25.70	+ 0.17	8.11	+ 8.07	11	5	33.94
	Jupiter 1 Limb.....	.....	.....	33.8	.....	0.2	34	33.72	+ 0.31	.....	+ 8.08	12	34	42.11
	Jupiter 2 Limb.....	.....	.....	.....	49.3	.....	34	36.00	+ 0.31	.....	+ 8.08	12	34	44.39
	12 Canum Venat.....	49.5	6.6	23.7	40.8	58.2	48	23.76	+ 0.02	8.00	+ 8.08	12	48	31.86
	α Ursæ Minoris S. P.	26.0	.....	.....	59.0	10.5	0	48.20	+ 16.71	.....	+ 8.09	.....	.....	.....
	η Bootis.....	27.2	41.2	55.3	9.5	23.5	46	55.34	+ 0.19	8.04	+ 8.10	13	47	3.63
	α Bootis.....	45.0	59.2	13.3	27.6	41.6	8	13.34	+ 0.18	8.18	+ 8.10	14	8	21.62
June 1	Mercury 2 Limb.....	.....	15.4	28.8	42.5	56.3	0	28.88	+ 0.24	.....	+ 8.30	3	0	37.42
	Sun 1 Limb.....	46.3	1.0	15.5	29.9	44.1	33	15.36	+ 0.18	.....	+ 8.33	4	33	23.87
	Sun 2 Limb.....	3.1	17.5	31.8	46.3	0.6	35	31.86	+ 0.18	.....	+ 8.33	4	35	40.37
	α Aurigæ.....	1.7	20.8	40.0	59.1	18.2	4	39.96	- 0.06	+ 8.39	+ 8.33	5	4	48.23
	α Orionis.....	52.1	5.4	19.0	32.3	45.6	46	18.88	+ 0.27	8.41	+ 8.35	5	46	27.50

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
June 1	Venus 1 Limb.....	47.3	1.8	16.4	31.1	45.7	23 16.46	+ 0.17	.....	+ 8.37	7 23 25.00
	α Canis Minoris.....	17.2	30.5	43.8	57.3	10.6	30 43.88	+ 0.28	+ 8.42	+ 8.37	7 30 52.53
	β Geminorum.....	49.4	4.4	19.5	34.5	49.7	35 19.50	+ 0.14	8.25	+ 8.37	7 35 28.01
	δ Leonis.....	57.0	11.2	25.4	39.7	53.8	5 25.42	+ 0.18	8.37	+ 8.40	11 5 34.00
	Mars 1 Limb.....	13.8	.....	40.4	.....	7.0	21 40.40	+ 0.28	.....	+ 8.40	11 21 49.08
	Mars 2 Limb.....	.....	27.4	.....	54.3	.....	21 40.85	+ 0.28	.....	+ 8.40	11 21 49.53
	Jupiter 1 Limb.....	.....	16.6	.....	43.1	.....	34 29.85	+ 0.33	.....	+ 8.41	12 34 38.59
	Jupiter 2 Limb.....	5.8	.....	32.3	.....	58.8	34 32.30	+ 0.33	.....	+ 8.41	12 34 41.04
June 3	α Ursæ Minoris S. P.	25.5	37.5	48.5	59.5	11.0	0 48.40	+ 17.09	.....	+ 8.42	.....
	Sun 1 Limb.....	.....	.....	.....	40.6	55.0	41 26.22	+ 0.23	.....	+ 8.76	4 41 35.21
	Sun 2 Limb.....	14.0	28.6	42.8	57.1	11.6	43 42.82	+ 0.23	.....	+ 8.76	4 43 51.81
	α Aurigæ.....	1.3	20.5	39.7	58.7	17.8	4 39.60	- 0.02	+ 8.74	+ 8.76	5 4 48.34
	α Orionis.....	51.8	5.1	18.5	31.9	45.3	46 18.52	+ 0.34	8.71	+ 8.77	5 46 27.63
	α Canis Minoris.....	16.8	30.1	43.5	56.8	10.1	30 43.46	+ 0.34	8.77	+ 8.78	7 30 52.58
	Venus 1 Limb.....	47.8	2.3	16.8	31.5	46.1	33 16.90	+ 0.23	.....	+ 8.78	7 33 25.91
	β Geminorum.....	48.8	3.8	19.0	31.1	49.3	35 19.00	+ 0.19	8.69	+ 8.78	7 35 27.97
	Jupiter 1 Limb.....	57.9	.....	24.4	.....	51.0	34 24.43	+ 0.40	.....	+ 8.80	12 34 33.63
	Jupiter 2 Limb.....	.....	13.7	.....	40.2	.....	34 26.95	+ 0.40	.....	+ 8.80	12 34 36.15
	α Ursæ Minoris S. P.	26.0	37.0	48.5	59.0	9.5	0 48.00	+ 18.27	.....	+ 8.81	.....
	α Coronæ borealis.....	16.2	30.8	45.8	0.8	15.7	27 45.86	+ 0.19	9.04	+ 8.81	15 27 54.86
June 4	Sun 1 Limb.....	4.0	17.4	32.0	46.3	0.8	45 32.10	+ 0.23	.....	+ 8.86	4 45 41.19
	Sun 2 Limb.....	20.0	34.6	49.0	3.5	17.9	47 49.00	+ 0.23	.....	+ 8.86	4 47 58.09
	ζ Pegasi.....	51.2	4.7	18.3	31.8	45.3	33 18.26	+ 0.31	+ 8.84	+ 8.92	22 33 27.49
	α Pegasi.....	9.4	23.2	36.7	50.5	4.3	56 36.82	+ 0.28	8.86	+ 8.92	22 56 46.02
	ϕ Aquarii.....	24.4	37.7	51.0	4.4	17.7	5 51.04	+ 0.41	.....	+ 8.92	23 6 0.37
	Moon 2 Limb.....	22.1	35.6	49.4	3.0	16.7	15 49.36	+ 0.42	.....	+ 8.92	23 15 58.70
	ι Piscium.....	5.7	19.0	32.2	45.4	58.8	31 32.22	+ 0.34	8.94	+ 8.92	23 31 41.48
	α Andromedæ.....	26.1	41.3	56.4	11.4	26.5	59 56.34	+ 0.17	8.88	+ 8.93	0 0 5.44
	γ Pegasi.....	21.5	34.8	48.6	2.5	16.2	4 48.72	+ 0.28	9.00	+ 8.93	0 4 57.93
	α Ursæ Minoris.....	.....	14.5	25.0	.....	.....	1 25.35	- 17.93	.....	+ 8.93	1 1 16.35
June 5	Sun 1 Limb.....	9.6	24.2	38.7	53.1	7.7	49 38.66	+ 0.22	.....	+ 8.95	4 49 47.83
	Sun 2 Limb.....	26.8	41.2	55.6	10.1	24.6	51 55.66	+ 0.22	.....	+ 8.95	4 52 4.83
	α Aurigæ.....	1.2	20.4	39.5	58.5	17.5	4 39.42	- 0.05	8.98	+ 8.95	5 4 48.32
	α Canis Minoris.....	16.6	29.8	43.3	56.6	10.0	30 43.26	+ 0.33	8.98	+ 8.98	7 30 52.57
	β Geminorum.....	48.6	3.8	18.8	33.9	49.0	35 18.82	+ 0.17	8.89	+ 8.98	7 35 27.97
	Venus 1 Limb.....	42.9	57.4	12.1	26.7	41.3	43 12.08	+ 0.21	.....	+ 8.99	7 43 21.28
	Mars 1 Limb.....	35.3	48.7	2.1	15.4	28.7	27 2.04	+ 0.34	.....	+ 9.03	11 27 11.41
	β Leonis.....	15.6	29.4	43.0	56.8	10.6	40 43.08	+ 0.27	8.99	+ 9.04	11 40 52.39
	Jupiter 1 Limb.....	55.2	.....	21.7	.....	48.3	34 21.73	+ 0.39	.....	+ 9.05	12 34 31.17
	Jupiter 2 Limb.....	.....	11.0	.....	37.6	.....	34 24.30	+ 0.39	.....	+ 9.05	12 34 33.74
	12 Canum Venat.....	48.4	5.6	22.5	39.8	57.0	48 22.66	+ 0.05	9.00	+ 9.05	12 48 31.76
	α Ursæ Minoris S. P.	25.5	37.5	49.0	59.5	11.0	0 48.50	+ 18.99	.....	+ 9.05	13 1 16.54
	Saturn 1 Limb Ring.....	.....	25.8	.....	53.7	.....	19 39.75	+ 0.48	.....	+ 9.10	16 19 49.33
	Saturn 2 Limb Ring.....	14.5	.....	42.7	.....	10.8	19 42.67	+ 0.48	.....	+ 9.10	16 19 52.25
June 6	α Bootis.....	43.8	57.9	12.1	26.3	40.5	8 12.12	+ 0.17	+ 9.38	+ 9.38	.....
June 7	δ Leonis.....	55.8	10.0	24.2	38.6	52.8	5 24.28	+ 0.10	+ 9.53	+ 9.49	11 5 33.87
	Mars 1 Limb.....	23.5	36.9	50.3	3.7	16.9	29 50.26	+ 0.19	.....	+ 9.49	11 29 59.94
	12 Canum Venat.....	47.8	5.1	22.3	39.5	56.6	48 22.26	- 0.04	9.47	+ 9.50	12 48 31.72
	α Ursæ Minoris S. P.	31.5	40.5	54.0	4.0	16.0	0 53.20	+ 15.51	.....	+ 9.50	.....
	η Bootis.....	25.8	39.8	53.9	8.0	22.1	46 53.92	+ 0.12	9.49	+ 9.50	13 47 3.54
	α Bootis.....	43.7	58.0	12.0	26.2	40.4	8 12.06	+ 0.11	9.49	+ 9.50	14 8 21.67
	Saturn 1 Limb Ring.....	34.5	.....	2.7	.....	30.9	19 2.70	+ 0.29	.....	+ 9.51	16 19 12.50
	Saturn 2 Limb Ring.....	.....	51.8	.....	20.0	.....	19 5.90	+ 0.29	.....	+ 9.51	16 19 15.70

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpo- lated.			
June 7	Mercury 2 Limb.....	s. 48.3	s. 2.4	s. 16.5	s.	s. 44.2	m. 41	s. 16.35	s. + 0.12	s.	s. + 9.56	h. 3	m. 41	s. 26.03
June 8	α Canis Minoris	15.9	29.3	42.7	56.2	9.5	30	42.72	+ 0.18	+ 9.66	+ 9.57	7	30	52.47
	β Geminorum	48.1	3.2	18.2	33.4	48.5	35	18.28	+ 0.05	9.54	+ 9.57	7	35	27.90
	δ Leonis	55.6	10.0	24.2	38.5	52.7	5	24.20	+ 0.09	9.61	+ 9.59	11	5	33.88
	Mars 1 Limb	49.7	3.0	16.2	29.5	42.8	31	16.24	+ 0.19	.....	+ 9.60	11	31	26.03
	β Leonis	15.1	28.7	42.6	56.4	10.3	40	42.62	+ 0.13	9.56	+ 9.60	11	40	52.35
	Jupiter 1 Limb .....	.....	9.6	.....	36.1	.....	34	22.85	+ 0.23	.....	+ 9.62	12	34	32.70
	Jupiter 2 Limb	58.7	.....	25.4	.....	51.8	34	25.30	+ 0.23	.....	+ 9.62	12	34	35.15
	12 Canum Venat.	47.8	5.0	22.2	39.5	56.6	48	22.22	- 0.05	9.51	+ 9.62	12	48	31.79
	α Ursæ Minoris S. P.	31.0	42.0	53.5	3.5	15.5	0	53.10	+ 16.25	.....	+ 9.62	.....	.....	.....
	Saturn 1 Limb Ring	.....	30.6	.....	58.8	.....	18	44.70	+ 0.29	.....	+ 9.68	16	18	54.67
	Saturn 2 Limb Ring	19.5	.....	47.6	.....	15.8	18	47.63	+ 0.29	.....	+ 9.68	16	18	57.60
June 10	α Virginis	7.7	21.3	35.0	48.3	1.9	16	34.84	+ 0.23	+ 10.16	+ 10.38	12	16	45.45
	δ Ophiuchi	20.4	33.5	46.8	0.2	13.7	5	46.92	+ 0.19	10.47	+ 10.41	16	5	57.52
	α Scorpii .....	.....	10.3	25.0	39.8	54.6	19	25.03	+ 0.28	10.61	+ 10.40	16	19	35.71
	α Aurigæ.....	0.3	19.2	38.3	57.5	16.5	4	38.36	- 0.18	+ 10.26	+ 10.34	5	4	48.52
June 11	Sun 1 Limb.....	55.1	9.6	24.1	38.5	53.0	14	24.06	+ 0.04	.....	+ 10.34	5	14	34.44
	Sun 2 Limb.....	12.4	27.0	41.5	56.0	10.5	16	41.48	+ 0.04	.....	+ 10.34	5	16	51.86
	β Geminorum	47.4	2.3	17.4	.....	.....	35	17.47	0.00	10.40	+ 10.36	7	35	27.83
	Venus 1 Limb.....	.....	8.7	23.0	.....	.....	12	23.05	+ 0.04	.....	+ 10.37	8	12	33.46
	α Ursæ Minoris S. P.	.....	.....	55.0	6.0	17.0	0	54.90	+ 15.83	.....	+ 10.48	.....	.....	.....
June 12	α Bootis	42.5	56.6	10.7	24.8	39.0	8	10.72	0.00	+ 10.92	+ 11.05	14	8	21.77
	ϵ Bootis	18.9	34.2	49.1	4.1	19.2	37	49.10	- 0.04	10.89	+ 11.06	14	38	0.12
	β Libræ	45.5	59.1	12.6	26.1	39.6	8	12.58	+ 0.14	10.96	+ 11.07	15	8	23.79
	α Coronæ borealis....	14.0	29.1	43.8	58.7	13.8	27	43.88	- 0.04	11.25	+ 11.08	15	27	54.92
	α Serpentis.....	44.9	58.5	11.8	25.2	38.6	36	11.80	+ 0.07	11.33	+ 11.08	15	36	22.95
	Saturn 1 Limb Ring	.....	.....	32.0	.....	0.2	17	32.03	+ 0.17	.....	+ 11.10	16	17	43.30
	Saturn 2 Limb Ring	.....	20.8	.....	48.7	.....	17	34.75	+ 0.17	.....	+ 11.10	16	17	46.02
	Mercury 2 Limb.....	27.5	41.7	55.8	10.2	24.4	16	55.92	- 0.04	.....	+ 11.38	4	17	7.26
June 13	Sun 1 Limb.....	11.7	26.2	40.7	55.3	9.7	22	40.72	- 0.05	.....	+ 11.41	5	22	52.08
	Sun 2 Limb.....	29.1	43.7	58.1	12.7	27.2	24	58.16	- 0.05	.....	+ 11.41	5	25	9.52
	α Canis Minoris	14.3	27.7	40.9	54.4	7.8	30	41.02	+ 0.02	+ 11.53	+ 11.46	7	30	52.50
	β Geminorum	46.4	1.4	16.6	31.6	46.7	35	16.54	- 0.08	11.42	+ 11.46	7	35	27.92
	Venus 1 Limb.....	25.1	39.3	53.6	8.0	22.2	21	53.64	- 0.05	.....	+ 11.48	8	22	5.07
	α Ursæ Minoris S. P.	34.5	46.5	57.5	8.0	19.5	0	57.20	+ 13.87	.....	+ 11.58	.....	.....	.....
	ϵ Bootis	41.7	55.9	10.0	24.2	38.4	8	10.04	- 0.03	11.62	+ 11.60	14	8	21.61
	ϵ Bootis	18.4	33.4	48.6	3.6	18.6	37	48.52	- 0.07	11.49	+ 11.61	14	38	0.06
	α^2 Libræ	22.0	35.8	49.7	3.6	17.2	41	49.66	+ 0.10	11.76	+ 11.61	14	42	1.37
	Saturn 1 Limb Ring	.....	59.8	.....	27.8	.....	17	13.80	+ 0.11	.....	+ 11.64	16	17	25.55
	Saturn 2 Limb Ring	48.7	.....	16.8	.....	44.8	17	16.77	+ 0.11	.....	+ 11.64	16	17	28.52
	Mercury 2 Limb.....	16.3	30.5	44.7	59.1	13.3	24	44.78	- 0.03	.....	+ 11.85	4	24	56.60
June 14	Sun 1 Limb.....	20.2	35.0	49.2	3.6	18.1	26	49.22	- 0.04	.....	+ 11.87	5	27	1.05
	Sun 2 Limb.....	37.7	52.3	6.8	21.5	36.0	29	6.86	- 0.04	.....	+ 11.87	5	29	18.69
	α Canis Minoris	13.7	27.2	40.5	53.8	7.2	30	40.48	+ 0.04	+ 12.05	+ 11.91	7	30	52.43
	β Geminorum	45.8	1.0	16.1	31.2	46.4	35	16.10	- 0.07	11.85	+ 11.91	7	35	27.94
	Venus 1 Limb.....	8.0	22.2	36.5	50.8	5.1	26	36.52	- 0.03	.....	+ 11.92	8	26	48.41
	Mars 1 Limb	47.8	1.1	14.5	27.7	41.0	40	14.42	+ 0.06	.....	+ 11.98	11	40	26.46
	Jupiter 1 Limb.....	14.6	.....	41.1	.....	7.6	34	41.10	+ 0.08	.....	+ 11.99	12	34	53.17
	Jupiter 2 Limb.....	.....	30.1	.....	56.8	.....	34	43.45	+ 0.08	.....	+ 11.99	12	34	55.52
	12 Canum Venat.	45.5	2.7	19.7	36.8	54.2	48	19.78	- 0.16	11.97	+ 11.99	12	48	31.61
	α Ursæ Minoris S. P.	35.0	46.0	56.5	8.0	19.0	0	56.90	+ 14.63	.....	+ 12.00	.....	.....	.....
	η Bootis.....	23.5	37.5	51.6	5.6	19.7	46	51.58	- 0.02	11.93	+ 12.01	13	47	3.57

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
June 14	α Bootis	41.3	55.5	9.6	23.8	37.8	m. s.	8 9.60	- 0.02	+ 12.05	+ 12.01	h. m. s.
	Saturn 1 Limb Ring	28.0	.....	56.2	.....	24.1	16	56.10	+ 0.14	.....	+ 12.04	14 8 21.59
	Saturn 2 Limb Ring	.....	44.7	.....	13.1	.....	16	58.90	+ 0.14	.....	+ 12.04	16 17 8.28
	Mercury 2 Limb.....	18.4	32.6	47.1	1.4	15.6	32	47.02	+ 0.04	.....	+ 12.22	16 17 11.08
June 15	Sun 1 Limb.....	28.8	43.4	58.0	12.4	27.1	30	57.94	+ 0.03	.....	+ 12.24	4 32 59.28
	Sun 2 Limb.....	46.6	1.2	15.6	30.2	44.6	33	15.64	+ 0.03	.....	+ 12.24	5 31 10.21
	Venus 1 Limb.....	49.0	3.3	17.7	32.0	46.2	31	17.64	+ 0.04	.....	+ 12.24	5 33 27.91
	Moon 1 Limb	0.5	15.0	29.4	43.8	58.1	17	29.36	+ 0.07	.....	+ 12.28	8 31 29.96
	ϵ Leonis.....	1.6	16.2	30.7	45.4	0.0	36	30.78	+ 0.02	+ 12.37	+ 12.29	9 17 41.72
	α Leonis.....	8.9	22.5	36.1	49.7	3.4	59	36.12	+ 0.11	12.35	+ 12.30	9 36 43.09
	Mars 1 Limb.....	21.4	34.6	47.8	1.1	14.4	41	47.86	+ 0.16	.....	+ 12.32	9 59 48.53
	Jupiter 1 Limb	19.7	.....	46.2	.....	13.0	34	46.30	+ 0.19	.....	+ 12.32	11 42 0.34
	Jupiter 2 Limb .....	.....	35.5	.....	2.1	.....	34	48.80	+ 0.19	.....	+ 12.34	12 34 58.83
	12 Canum Venat.	45.3	2.5	19.5	36.6	53.6	48	19.50	- 0.11	12.18	+ 12.34	12 35 1.33
	α Ursæ Minoris S. P.	32.5	44.0	55.5	5.0	17.5	0	54.90	+ 17.32	.....	+ 12.35	12 48 31.74
	η Bootis.....	22.8	36.8	51.0	5.1	19.3	46	51.00	+ 0.06	12.42	+ 12.35	.....
	α Bootis	41.0	55.1	9.2	23.4	37.5	8	9.24	+ 0.05	12.42	+ 12.37	13 47 3.43
	Saturn 1 Limb Ring	.....	24.2	.....	52.5	.....	16	38.35	+ 0.26	.....	+ 12.38	14 8 21.67
	Saturn 2 Limb Ring	13.2	.....	41.6	.....	9.8	16	41.53	+ 0.26	.....	+ 12.42	16 16 51.03
June 16	ϵ Leonis	1.3	15.7	30.5	44.9	59.7	36	30.42	- 0.04	+ 12.79	+ 12.42	16 16 54.21
	α Leonis	8.6	22.2	35.6	49.4	3.0	59	35.76	+ 0.03	12.79	+ 12.81	9 36 43.19
	Moon 1 Limb	40.9	55.0	8.9	22.8	36.7	8	8.86	+ 0.03	.....	+ 12.81	9 59 48.60
	ρ Leonis.....	41.2	54.7	8.1	21.6	35.1	24	8.14	+ 0.04	.....	+ 12.82	10 8 21.71
	δ Leonis.....	52.5	6.7	21.0	35.1	49.5	5	20.96	- 0.02	12.88	+ 12.82	10 24 21.00
	α Tauri.....	0.7	14.5	28.6	42.3	56.1	26	28.44	- 0.07	+ 13.31	+ 12.84	11 5 33.78
	Mercury 2 Limb.....	2.3	16.6	31.1	45.5	59.9	49	31.08	- 0.10	.....	+ 13.17	4 26 41.54
	α Aurigæ	57.5	16.6	35.7	54.7	13.8	4	35.66	- 0.26	13.17	+ 13.18	4 49 44.16
June 17	Sun 1 Limb.....	47.1	1.5	15.8	30.4	44.7	39	15.90	- 0.10	.....	+ 13.18	5 4 48.58
	Sun 2 Limb.....	4.6	19.1	33.7	48.0	2.4	41	33.56	- 0.10	.....	+ 13.19	5 39 28.99
	α Canis Minoris	12.6	26.1	39.4	52.6	6.0	30	39.34	- 0.04	13.27	+ 13.19	5 41 46.65
	β Geminorum	44.5	59.6	14.8	29.8	45.0	35	14.74	- 0.12	13.26	+ 13.23	7 30 52.53
	Venus 1 Limb.....	6.0	20.5	34.8	49.0	3.2	40	34.70	- 0.09	.....	+ 13.23	7 35 27.85
	ρ Leonis.....	40.7	54.1	7.7	21.2	34.5	24	7.64	- 0.05	.....	+ 13.25	8 40 47.86
	Moon 1 Limb	34.2	47.9	1.5	15.1	28.8	55	1.50	- 0.04	.....	+ 13.26	10 24 20.85
	δ Leonis.....	52.1	6.4	20.5	35.0	49.2	5	20.64	- 0.09	13.26	+ 13.27	10 55 14.73
	σ Leonis.....	11.3	24.7	38.1	51.5	4.8	12	38.08	- 0.04	.....	+ 13.27	11 5 33.82
	β Leonis	11.5	25.3	39.0	52.7	6.5	40	39.00	- 0.07	13.29	+ 13.27	11 12 51.31
	Mars 1 Limb	31.3	44.5	57.8	11.2	24.4	44	57.84	- 0.03	.....	+ 13.27	11 40 52.20
	Jupiter 1 Limb .....	.....	45.8	.....	12.2	.....	34	59.00	- 0.01	.....	+ 13.27	11 45 11.08
	Jupiter 2 Limb	34.7	.....	1.3	.....	28.0	35	1.33	- 0.01	.....	+ 13.28	12 35 12.27
	12 Canum Venat.	44.4	1.5	18.5	35.7	52.8	48	18.58	- 0.19	13.16	+ 13.28	12 35 14.60
	α Ursæ Minoris S. P.	39.0	50.0	2.5	10.5	22.0	1	0.80	+ 11.96	.....	+ 13.28	12 48 31.67
	Mercury 2 Limb.....	43.4	57.8	12.3	26.4	41.3	58	12.24	- 0.04	.....	+ 13.28	.....
June 18	Sun 1 Limb.....	56.2	10.7	25.2	39.7	54.3	43	25.22	- 0.04	.....	+ 13.40	4 58 25.60
	Sun 2 Limb.....	13.7	28.2	42.8	57.5	12.1	45	42.86	- 0.04	.....	+ 13.41	5 43 38.59
	Venus 1 Limb.....	42.6	.....	10.7	.....	39.5	45	10.94	- 0.02	.....	+ 13.41	5 45 56.23
	Mercury 2 Limb.....	35.6	50.2	4.6	.....	.....	7	4.64	+ 0.02	.....	+ 13.43	8 45 24.35
June 19	Sun 1 Limb.....	5.6	20.0	34.6	49.0	3.6	47	34.56	+ 0.02	.....	+ 13.58	5 7 18.24
	Sun 2 Limb.....	23.1	37.7	52.1	6.6	21.2	49	52.14	+ 0.02	.....	+ 13.58	5 47 48.16
	β Geminorum.....	44.1	59.3	14.5	29.6	44.6	35	14.42	- 0.01	+ 13.48	+ 13.58	5 50 5.74
	Venus 1 Limb.....	16.9	31.0	45.2	59.2	13.4	49	45.14	+ 0.04	.....	+ 13.59	7 35 28.00
	α Leonis	7.6	21.3	34.8	48.3	1.8	59	34.76	+ 0.08	13.72	+ 13.60	8 49 58.78
	β Leonis	10.7	24.7	38.5	52.4	6.2	40	38.50	+ 0.06	13.64	+ 13.61	9 59 48.45
											+ 13.62	11 40 52.18

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpo- lated.			
June 19	Mars 1 Limb	45.4	58.6	12.0	25.3	38.5	48	11.96	+ 0.12	.....	+ 13.62	h. m. s.	11 48 25.70	
	η Virginis	1.6	14.7	28.0	41.4	54.7	11	28.08	+ 0.13	.....	+ 13.62		12 11 41.83	
	Moon 1 Limb	27.1	40.7	54.4	7.9	.....	22	54.33	+ 0.16	.....	+ 13.62		12 23 8.11	
	Jupiter 1 Limb	47.7	.....	14.2	.....	40.7	35	14.20	+ 0.15	.....	+ 13.62		12 35 27.97	
	Jupiter 2 Limb .....	.....	3.5	.....	29.9	.....	35	16.70	+ 0.15	.....	+ 13.62		12 35 30.47	
	12 Canum Venat.	43.6	0.8	18.0	35.2	52.3	48	17.98	- 0.11	+ 13.65	+ 13.62		12 48 31.49	
	α Ursæ Minoris S. P.	35.0	47.0	59.5	11.0	21.5	0	58.80	+ 15.06	.....	+ 13.62		12 48 31.49	
	ε Bootis	16.4	31.2	46.3	1.3	16.4	37	46.32	- 0.01	13.60	+ 13.62		14 37 59.93	
	Saturn 1 Limb Ring	1.7	.....	29.9	.....	58.0	15	29.87	+ 0.20	.....	+ 13.62		16 15 43.69	
	Saturn 2 Limb Ring .....	.....	18.8	.....	47.0	.....	15	32.90	+ 0.20	.....	+ 13.62		16 15 46.72	
June 20	Sun 2 Limb .....	.....	.....	1.5	.....	30.7	54	1.59	- 0.07	.....	+ 13.63		5 54 15.15	
	Mars 1 Limb	24.5	37.8	50.8	4.1	17.6	49	50.96	+ 0.01	.....	+ 13.63		11 50 4.60	
	12 Canum Venat.	43.8	0.9	18.1	35.2	52.3	48	18.06	- 0.18	+ 13.62	+ 13.63		12 48 31.51	
	α Ursæ Minoris S. P.	38.0	.....	2.5	13.0	24.5	1	1.72	+ 13.11	.....	+ 13.63		.....
	Moon 1 Limb .....	.....	.....	.....	44.4	58.2	6	30.59	+ 0.06	.....	+ 13.63		13 6 44.28	
	η Bootis	21.6	35.7	49.8	4.0	18.0	46	49.82	- 0.05	13.67	+ 13.63		13 47 3.40	
	α Bootis	39.5	53.7	8.0	22.1	36.3	8	7.92	- 0.06	13.73	+ 13.63		14 8 21.49	
	β Libræ	43.3	56.5	10.1	23.7	37.2	8	10.16	+ 0.05	13.47	+ 13.63		15 8 23.84	
	α Coronæ borealis	11.5	26.6	41.5	56.6	11.4	27	41.52	- 0.10	13.65	+ 13.64		15 27 55.06	
June 24	β Geminorum	43.8	58.8	13.9	29.1	44.2	35	13.96	- 0.10	+ 14.06	+ 14.06		.....
INSTRUMENT REVERSED.														
June 25	Sun 1 Limb	1.4	15.9	30.3	44.8	59.4	12	30.36	+ 0.29	.....	+ 14.38		6 12 45.03	
	Sun 2 Limb	19.0	33.6	48.0	2.5	17.2	14	48.06	+ 0.29	.....	+ 14.38		6 15 2.73	
June 28	Sun 1 Limb	27.6	42.1	56.6	11.1	25.7	24	56.62	+ 0.29	.....	+ 15.38		6 25 12.29	
	Sun 2 Limb	45.2	59.6	14.3	28.8	43.3	27	14.24	+ 0.29	.....	+ 15.38		6 27 29.91	
	α Ursæ Minoris S. P. ....	.....	.....	.....	.....	36.0	1	14.00	+ 5.43	.....	+ 15.47		.....
	ε Bootis .....	.....	.....	.....	59.0	14.2	37	44.10	+ 0.27	+ 15.46	+ 15.49		14 37 59.86	
	α Coronæ borealis	9.3	24.2	39.3	.....	.....	27	39.21	+ 0.28	15.54	+ 15.51		15 27 55.00	
June 29	Sun 1 Limb .....	.....	.....	5.0	19.6	34.2	29	5.10	+ 0.28	.....	+ 15.85		6 29 21.23	
	Sun 2 Limb	53.7	.....	.....	37.2	.....	31	22.70	+ 0.28	.....	+ 15.85		6 31 38.83	
	β Geminorum	41.5	56.7	11.8	27.0	42.1	35	11.82	+ 0.26	+ 15.87	+ 15.88		7 35 27.96	
	12 Canum Venat.	40.8	58.0	15.2	32.3	49.5	48	15.16	+ 0.21	16.00	+ 15.99		12 48 31.36	
	α Ursæ Minoris S. P. ....	.....	4.0	.....	.....	36.0	1	14.40	+ 5.05	.....	+ 16.00		.....
	η Bootis	18.8	32.8	47.0	1.1	15.2	46	46.98	+ 0.30	16.08	+ 16.01		13 47 3.29	
	α Bootis	36.8	51.0	5.2	19.3	33.5	8	5.16	+ 0.30	16.05	+ 16.01		14 8 21.47	
	ε Bootis	13.6	28.6	43.6	58.6	13.7	37	43.62	+ 0.26	15.94	+ 16.02		14 37 59.90	
	Saturn 1 Limb Ring	26.0	.....	53.8	.....	21.9	12	53.90	+ 0.50	.....	+ 16.04		16 13 10.44	
July 1	Saturn 2 Limb Ring .....	.....	42.8	.....	11.0	.....	12	56.90	+ 0.50	.....	+ 16.04		16 13 13.44	
	Sun 1 Limb	52.1	6.6	20.9	35.6	49.9	37	21.02	+ 0.41	.....	+ 16.62		6 37 38.05	
	Sun 2 Limb	9.5	24.0	38.6	53.0	7.4	39	38.50	+ 0.41	.....	+ 16.62		6 39 55.53	
	α Serpentis	39.2	.....	5.8	19.2	.....	36	5.86	+ 0.51	+ 16.82	+ 16.76		15 36 23.13	
	δ Ophiuchi	13.6	26.8	40.2	53.5	6.8	5	40.18	+ 0.57	16.88	+ 16.76		16 5 57.51	
	Saturn 1 Limb Ring .....	.....	11.1	.....	39.2	.....	12	25.15	+ 0.69	.....	+ 16.76		16 12 42.60	
	Saturn 2 Limb Ring	0.4	.....	28.2	.....	56.4	12	28.33	+ 0.69	.....	+ 16.76		16 12 45.78	
	α Herculis	36.4	50.6	4.2	18.1	31.7	7	4.20	+ 0.46	16.71	+ 16.77		17 7 21.43	
	Groomb. 944 S. P.	28.0	.....	39.0	15.0	50.5	10	39.32	+ 2.96	.....	+ 16.77		17 10 59.05	
	α Ophiuchi	46.2	59.9	13.6	27.2	40.8	27	13.54	+ 0.47	16.68	+ 16.77		17 27 30.78	
July 2	δ Ophiuchi	13.3	26.6	39.8	53.3	6.5	5	39.90	+ 0.74	+ 16.99	+ 16.90		16 5 57.54	
	Saturn 1 Limb Ring	43.4	.....	11.6	.....	39.5	12	11.50	+ 0.88	.....	+ 16.90		16 12 29.28	

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
July 2	Saturn 2 Limb Ring	.....	0.2	.....	28.7	.....	12 14.45	+ 0.88	.....	+ 16.90	16 12 32.23
	δ Ursæ Minoris	.....	.....	15.0	55.5	.....	24 13.50	- 4.80	.....	+ 16.94	.....
	α Lyrae	40.7	57.8	14.9	31.9	48.8	31 14.82	+ 0.38	+ 16.85	+ 16.94	18 31 32.14
	β Lyrae	22.1	37.7	53.7	9.5	25.3	43 53.66	+ 0.43	16.88	+ 16.95	18 44 11.04
	α Tauri	56.4	10.4	24.2	37.8	51.7	26 24.10	+ 0.39	+ 17.55	+ 17.36	4 26 41.85
	α Aurigæ	52.9	12.1	31.1	50.3	9.5	4 31.18	+ 0.23	17.56	+ 17.39	5 4 48.80
July 3	Sun 1 Limb	6.8	21.4	.....	50.3	5.1	45 35.90	+ 0.35	.....	+ 17.47	6 45 53.72
	Sun 2 Limb	24.6	39.0	53.4	7.8	22.4	47 53.44	+ 0.35	.....	+ 17.47	6 48 11.26
	Mercury 1 Limb	38.4	53.1	7.8	22.2	37.3	19 7.76	+ 0.34	.....	+ 17.49	7 19 25.59
	Venus 1 Limb	2.2	16.1	30.2	43.8	57.7	50 30.00	+ 0.39	.....	+ 17.61	9 50 48.00
	α Leonis	3.4	16.8	30.6	44.0	57.7	59 30.50	+ 0.40	17.59	+ 17.61	9 59 48.51
	Mars 1 Limb	3.8	17.1	30.3	43.7	56.8	12 30.34	+ 0.46	.....	+ 17.67	12 12 48.47
	Jupiter 1 Limb	42.8	.....	9.6	.....	36.3	38 9.57	+ 0.48	.....	+ 17.68	12 38 27.73
	Jupiter 2 Limb	.....	58.3	.....	25.1	.....	38 11.70	+ 0.48	.....	+ 17.68	12 38 29.86
	12 Canum Venat.	39.1	56.2	13.4	30.5	47.6	48 13.36	+ 0.27	17.67	+ 17.68	12 48 31.31
	α Ursæ Minoris S. P.	53.0	5.0	14.5	26.5	38.0	1 15.40	+ 5.86	.....	+ 17.68	.....
	η Bootis	17.1	31.2	45.3	59.5	13.5	46 45.32	+ 0.37	17.63	+ 17.69	13 47 3.38
	α Bootis	35.2	49.2	3.4	17.4	31.6	8 3.36	+ 0.37	17.74	+ 17.70	14 8 21.43
	α Coronæ borealis	7.0	21.8	36.8	51.8	6.7	27 36.82	+ 0.33	17.84	+ 17.72	15 27 54.87
	Saturn 1 Limb Ring	.....	43.7	.....	11.8	.....	11 57.75	+ 0.57	.....	+ 17.73	16 12 16.05
	Saturn 2 Limb Ring	32.6	.....	0.8	.....	28.9	12 0.77	+ 0.57	.....	+ 17.73	16 12 19.07
	* D. + 15° 40'	56.8	10.8	24.5	38.4	52.4	42 24.58	+ 0.39	.....	+ 17.74	16 42 42.71
	* D. + 16 4	12.9	26.8	40.6	54.3	8.2	43 40.56	+ 0.39	.....	+ 17.74	16 43 58.69
	* D. + 28 54	44.4	59.4	14.7	29.8	44.8	11 14.62	+ 0.32	.....	+ 17.74	17 11 32.68
	* D. + 32 2	43.8	59.8	15.3	30.8	46.9	15 15.32	+ 0.31	.....	+ 17.74	17 15 33.37
	* D. + 34 50	11.8	28.1	44.4	0.5	16.8	20 44.32	+ 0.29	.....	+ 17.75	17 21 2.36
	* D. + 35 4	55.4	11.6	27.8	44.1	0.4	23 27.86	+ 0.29	.....	+ 17.75	17 23 45.90
	* D. + 34 57	20.0	36.2	52.4	8.6	24.7	25 52.38	+ 0.29	.....	+ 17.75	17 26 10.42
	* D. + 41 15	30.0	47.7	5.6	23.2	41.1	45 5.52	+ 0.26	.....	+ 17.75	17 45 23.53
	* D. + 41 31	13.6	31.3	49.0	6.8	24.6	49 49.06	+ 0.26	.....	+ 17.75	17 50 7.07
July 4	Sun 1 Limb	14.8	29.3	43.6	58.1	12.6	49 43.68	+ 0.32	.....	+ 17.95	6 50 1.95
	Sun 2 Limb	31.7	46.4	0.7	15.2	29.7	52 0.74	+ 0.32	.....	+ 17.95	6 52 19.01
	Mercury 1 Limb	38.2	52.7	7.4	21.9	36.5	28 7.34	+ 0.32	.....	+ 17.95	7 28 25.61
	Venus 1 Limb	8.8	22.6	36.4	50.2	3.9	54 36.38	+ 0.36	.....	+ 17.99	9 54 54.73
	α Leonis	2.8	16.6	30.1	43.8	57.4	59 30.14	+ 0.37	+ 17.98	+ 17.99	9 59 48.50
	Mars 1 Limb	54.4	7.5	20.9	34.2	47.4	14 20.88	+ 0.43	.....	+ 18.03	12 14 39.34
	Jupiter 1 Limb	.....	13.2	.....	39.8	.....	38 26.50	+ 0.45	.....	+ 18.03	12 38 44.98
	Jupiter 2 Limb	2.1	.....	28.7	.....	55.5	38 28.77	+ 0.45	.....	+ 18.03	12 38 47.25
	12 Canum Venat.	38.7	55.8	13.0	30.2	47.4	48 13.02	+ 0.25	18.02	+ 18.03	12 48 31.30
	α Ursæ Minoris S. P.	55.0	6.0	15.5	27.0	38.5	1 16.40	+ 5.46	.....	+ 18.04	.....
	η Bootis	16.7	30.8	44.8	59.0	13.1	46 44.88	+ 0.34	18.09	+ 18.04	13 47 3.26
	α Bootis	34.7	48.9	3.0	17.1	31.3	8 3.00	+ 0.34	18.12	+ 18.04	14 8 21.38
	α Coronæ borealis	6.8	21.7	36.6	51.6	6.6	27 36.66	+ 0.31	18.01	+ 18.05	15 27 55.02
	Saturn 1 Limb Ring	16.6	.....	44.8	.....	13.0	11 44.80	+ 0.54	.....	+ 18.05	16 12 3.39
	Saturn 2 Limb Ring	.....	33.7	.....	1.8	.....	11 47.75	+ 0.54	.....	+ 18.05	16 12 6.34
	* D. + 15° 40'	56.5	10.3	24.0	37.8	51.7	42 24.06	+ 0.36	.....	+ 18.05	16 42 42.47
	* D. + 16 4	12.3	26.2	40.0	53.8	7.7	43 40.00	+ 0.36	.....	+ 18.05	16 43 58.41
	* D. + 28 54	43.8	59.1	14.2	29.4	44.6	11 14.22	+ 0.29	.....	+ 18.05	17 11 32.56
	* D. + 32 2	43.5	59.4	15.3	30.8	46.6	15 15.12	+ 0.28	.....	+ 18.05	17 15 33.45
	* D. + 34 50	11.6	27.7	44.2	0.4	16.5	20 44.08	+ 0.26	.....	+ 18.05	17 21 2.39
	* D. + 35 4	55.2	11.4	27.6	43.8	0.2	23 27.64	+ 0.26	.....	+ 18.05	17 23 45.95
	* D. + 34 57	19.3	35.8	52.0	8.2	24.6	25 51.98	+ 0.26	.....	+ 18.05	17 26 10.29
	* D. + 34 52	11.7	27.8	44.1	0.3	16.5	28 44.08	+ 0.26	.....	+ 18.05	17 29 2.39
	* D. + 41 15	30.0	47.8	5.8	23.1	40.7	45 5.48	+ 0.21	.....	+ 18.05	17 45 23.77
	* D. + 41 31	13.4	31.0	48.8	6.6	24.3	49 48.82	+ 0.24	.....	+ 18.05	17 50 7.11
	α Ursæ Minoris	4.0	16.0	.....	.....	.....	1 26.60	- 4.52	.....	+ 18.08	.....

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpolated.	
July 4	Moon 2 Limb.....	34.0	48.2	2.0	16.2	30.1	35	2.10	+ 0.37	.....	+ 18.08	1 35 20.55
July 5	Sun 1 Limb.....	21.9	36.5	50.9	5.3	19.8	53	50.88	+ 0.31	.....	+ 18.09	6 54 9.28
	Sun 2 Limb.....	39.0	53.6	7.9	22.3	36.8	56	7.92	+ 0.31	.....	+ 18.09	6 56 26.32
	Mercury 1 Limb.....	28.0	42.8	57.2	11.7	26.3	36	57.20	+ 0.31	.....	+ 18.10	7 37 15.61
July 8	Sun 1 Limb.....	42.3	56.8	11.2	25.6	40.0	6	11.18	+ 0.26	.....	+ 18.31	7 6 29.75
	Sun 2 Limb.....	59.0	13.5	27.8	42.3	56.8	8	27.88	+ 0.26	.....	+ 18.31	7 8 46.45
	Mercury 1 Limb.....	55.5	9.8	24.4	38.6	53.1	2	24.28	+ 0.27	.....	+ 18.31	8 2 42.86
	Venus 1 Limb.....	17.1	30.9	44.7	58.1	11.9	10	44.54	+ 0.31	.....	+ 18.32	10 11 3.17
	Mars 1 Limb.....	24.5	37.8	51.1	4.6	17.8	21	51.16	+ 0.39	.....	+ 18.32	12 22 9.87
	12 Canum Venat.	38.4	55.7	12.7	29.8	47.0	48	12.72	+ 0.17	+ 18.33	+ 18.32	12 48 31.21
	α Ursæ Minoris S. P.	59.0	11.0	21.0	32.5	44.0	1	21.50	+ 6.52	.....	+ 18.33	13 1 46.35
	η Bootis.....	16.5	30.5	44.4	58.6	12.7	46	44.54	+ 0.28	18.45	+ 18.33	13 47 3.15
	α Bootis.....	34.5	48.6	2.8	16.8	31.1	8	2.76	+ 0.28	18.37	+ 18.33	14 8 21.37
	β Libræ.....	38.2	51.5	5.0	18.4	31.7	8	4.96	+ 0.43	18.22	+ 18.33	15 8 23.72
	α Coronæ borealis.....	6.6	21.5	36.4	51.3	6.3	27	36.42	+ 0.24	18.29	+ 18.33	15 27 54.99
	α Serpentis.....	37.7	51.1	4.5	17.8	31.2	36	4.46	+ 0.35	18.34	+ 18.33	15 36 23.14
	Saturn 1 Limb Ring..	.....	41.8	.....	10.0	.....	10	55.90	+ 0.50	.....	+ 18.33	16 11 14.73
	Saturn 2 Limb Ring..	30.8	.....	58.8	.....	26.8	10	58.80	+ 0.50	.....	+ 18.33	16 11 17.63
	* D. + 15° 40'.....	56.3	10.0	23.7	37.6	51.5	42	23.82	+ 0.30	.....	+ 18.33	16 42 42.45
	* D. + 16 4.....	12.2	26.0	39.8	53.6	7.5	43	39.82	+ 0.30	.....	+ 18.33	16 43 58.45
	A. S. C. 1956.....	32.0	.....	.....	.....	25.2	56	58.60	+ 0.38	.....	.....	.....†
	.....	.....	45.9	59.0	12.4	.....	.....	59.10	+ 0.38	.....	+ 18.33	16 57 17.81
	* D. + 28° 54'.....	43.5	58.8	13.8	29.2	44.4	11	13.94	+ 0.23	.....	+ 18.33	17 11 32.50
	* D. + 32 2.....	43.7	59.0	14.9	30.4	46.2	15	14.84	+ 0.21	.....	+ 18.33	17 15 33.38
	* D. + 34 50.....	11.4	27.3	43.8	0.1	16.2	20	43.76	+ 0.19	.....	+ 18.33	17 21 2.28
	* D. + 35 4.....	55.1	11.1	27.3	43.5	59.7	23	27.34	+ 0.19	.....	+ 18.33	17 23 45.86
	* D. + 34 57.....	19.2	35.3	51.6	8.0	24.4	25	51.70	+ 0.19	.....	+ 18.33	17 26 10.22
	* D. + 34 52.....	11.2	27.6	43.9	0.2	16.3	28	43.84	+ 0.19	.....	+ 18.33	17 29 2.36
	* D. + 41 15.....	29.6	47.6	4.8	22.8	40.4	45	5.04	+ 0.16	.....	+ 18.33	17 45 23.53
	* D. + 41 31.....	13.2	30.7	48.6	6.2	24.1	49	48.56	+ 0.16	.....	+ 18.33	17 50 7.05
	δ Ursæ Minoris.....	45.0	29.0	12.5	55.5	39.0	24	12.20	- 2.62	.....	+ 18.34	18 24 27.92
July 9	Sun 1 Limb.....	48.0	2.4	16.6	31.0	45.5	10	16.70	+ 0.22	.....	+ 18.82	7 10 35.74†
	Sun 2 Limb.....	4.5	19.0	33.4	47.7	2.2	12	33.36	+ 0.22	.....	+ 18.82	7 12 52.40†
	α Scorpii.....	47.0	1.6	16.5	31.4	46.0	19	16.50	+ 0.47	+ 19.04	+ 18.84	16 19 35.81†
	944 Groomb. S. P. ...	30.0	4.0	39.0	15.0	.....	10	39.58	+ 1.80	.....	+ 18.84	17 11 0.22†
	* D. + 32° 8'.....	15.5	31.3	47.0	2.5	18.2	15	46.90	+ 0.17	.....	+ 18.84	17 16 5.91†
	* D. + 34 39.....	12.2	28.0	44.5	0.5	16.7	27	44.38	+ 0.15	.....	+ 18.84	17 28 3.37†
	* D. + 34 52.....	.....	.....	.....	59.5	15.4	28	43.18	+ 0.15	.....	+ 18.84	17 29 2.17†
	δ Ursæ Minoris.....	41.5	25.0	8.0	51.5	.....	24	8.10	- 2.17	.....	+ 18.84†
	α Lyrae.....	39.1	56.1	13.2	30.1	.....	31	13.12	+ 0.14	18.82	+ 18.84	18 31 32.10†
	β Lyrae.....	20.4	36.1	52.1	.....	24.0	43	52.12	+ 0.16	18.74	+ 18.85	18 44 11.13†
July 10	ζ Aquilæ.....	.....	31.0	44.5	58.2	11.9	57	44.57	+ 0.26	18.74	+ 18.85	18 58 3.68†
	Venus 1 Limb.....	10.1	23.5	37.4	51.0	4.4	18	37.28	+ 0.31	.....	+ 19.00	10 18 56.59†
	δ Leonis.....	.....	.....	.....	28.5	43.0	5	14.36	+ 0.26	+ 19.00	+ 19.01	11 5 33.63†
July 12	β Leonis.....	5.1	19.0	32.7	46.5	0.2	40	32.70	+ 0.29	19.02	+ 19.01	11 40 52.00†
	β Leonis.....	.....	.....	32.4	46.2	0.0	40	32.42	+ 0.32	+ 19.25	+ 19.30	11 40 52.04†
	δ Ophiuchi.....	.....	24.6	37.9	51.2	4.5	5	37.90	+ 0.42	19.28	+ 19.34	16 5 57.66†
July 12	Saturn 1 Limb Ring..	.....	57.6	.....	25.6	.....	10	11.60	+ 0.52	.....	+ 19.34	16 10 31.46†
	Saturn 2 Limb Ring..	.....	.....	14.4	.....	42.4	10	14.34	+ 0.52	.....	+ 19.34	16 10 34.20†
	α Scorpii.....	46.4	1.2	16.2	30.8	45.5	19	16.02	+ 0.56	19.42	+ 19.34	16 19 35.92†
	944 Groomb. S. P. ...	.....	5.0	40.0	16.0	.....	10	40.33	+ 2.23	.....	+ 19.35	17 11 1.91†
	* D. + 32° 8'.....	15.0	30.7	46.5	2.1	17.7	15	46.40	+ 0.23	.....	+ 19.35	17 16 5.98†
	* D. + 34 39.....	11.6	27.8	44.0	0.1	16.2	27	43.94	+ 0.21	.....	+ 19.36	17 28 3.51†

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instrument.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpolated.	
July 12	δ Ursæ Minoris	41.0	24.0	7.5	.....	.....	m. s. 24 7.43		- 2.59	.....	+ 19.37†
July 13	Sun 1 Limb.....	7.4	21.7	36.1	50.5	4.8	26 36.10		+ 0.30	.....	+ 19.55	7 26 55.95†
	Sun 2 Limb.....	.....	38.1	52.4	6.7	21.1	28 52.42		+ 0.30	.....	+ 19.55	7 29 12.27†
	Mercury 1 Limb.....	.....	49.4	3.4	17.6	32.0	41 3.50		+ 0.30	.....	+ 19.56	8 41 23.36†
	α Leonis.....	.....	.....	28.6	42.2	55.6	59 28.51		+ 0.34	+ 19.63	+ 19.58	9 59 48.43†
	Venus 1 Limb.....	45.7	59.2	12.6	26.2	40.0	30 12.74		+ 0.36	.....	+ 19.59	10 30 32.69†
	α Serpentis.....	36.3	49.7	3.2	.....	30.0	36 3.14		+ 0.38	19.60	+ 19.64	15 36 23.16†
July 15	Sun 1 Limb.....	14.4	28.6	43.0	57.4	11.6	34 43.00		+ 0.30	.....	+ 19.99	7 35 3.29†
	Sun 2 Limb.....	30.3	44.6	59.1	13.4	27.7	36 59.02		+ 0.30	.....	+ 19.99	7 37 19.31†
	α Leonis.....	.....	14.5	.....	41.7	55.4	59 28.13		+ 0.35	+ 20.00	+ 20.01	9 59 48.49†
	Venus 1 Limb.....	20.1	33.4	47.1	0.5	14.1	37 47.04		+ 0.37	.....	+ 20.02	10 38 7.43†
	Moon 1 Limb.....	54.4	8.0	21.5	35.0	48.6	20 21.50		+ 0.41	.....	+ 20.02	11 20 41.93†
	β Leonis.....	4.1	17.8	31.6	.....	59.3	40 31.64		+ 0.34	19.99	+ 20.03	11 40 52.01†
	ϵ Bootis.....	9.4	24.2	39.4	54.3	9.3	37 39.32		+ 0.26	20.06	+ 20.05	14 37 59.63†
	α^2 Libræ.....	13.2	27.0	40.7	54.5	8.4	41 40.76		+ 0.51	20.08	+ 20.05	14 42 1.32†
	β Libræ.....	36.1	49.5	3.1	16.4	30.0	8 3.02		+ 0.47	20.07	+ 20.05	15 8 23.54†
	944 Groomb. S. P. ...	29.5	5.0	40.5	16.0	.....	10 40.32		+ 2.48	.....	+ 20.06	17 11 2.86†
	* D. + 32°.8'.....	14.5	30.0	45.6	1.3	17.1	15 45.70		+ 0.24	.....	+ 20.06	17 16 6.00†
	* D. + 34°.39'.....	11.1	27.0	43.2	59.3	15.5	27 43.22		+ 0.22	.....	+ 20.07	17 28 3.51†
	δ Ursæ Minoris.....	39.5	23.0	7.5	49.7	33.0	24 6.54		- 2.91	.....	+ 20.07†
July 16	Sun 1 Limb.....	17.0	31.4	45.4	59.8	14.2	38 45.56		+ 0.45	.....	+ 20.15	7 39 6.16†
	Sun 2 Limb.....	32.9	47.2	1.4	15.7	30.1	41 1.46		+ 0.45	.....	+ 20.15	7 41 22.06†
	α Ophiuchi.....	43.0	56.5	10.0	23.6	37.2	27 10.06		+ 0.51	+ 20.13	+ 20.22	17 27 30.79†
	δ Ursæ Minoris	41.0	25.0	7.5	50.0	.....	24 7.50		- 4.24	.....	+ 20.22†
	α Lyræ.....	37.5	54.5	11.6	28.4	45.5	31 11.50		+ 0.31	20.27	+ 20.22	18 31 32.03†
	β Lyræ.....	18.7	34.5	50.5	6.3	22.2	43 50.44		+ 0.35	20.25	+ 20.22	18 44 11.01†
July 17	δ Ursæ Minoris	40.0	24.0	.....	.....	.....	24 7.05		- 3.33	.....	+ 19.87	.....
	α Lyræ.....	38.2	55.1	12.0	29.1	46.2	31 12.12		+ 0.25	+ 19.71	+ 19.87	18 31 32.24
	β Lyræ.....	19.1	34.8	50.8	6.6	22.6	43 50.78		+ 0.29	19.97	+ 19.87	18 44 10.94
	ζ Aquilæ.....	16.0	29.6	43.5	57.1	10.7	57 43.38		+ 0.42	19.83	+ 19.87	18 58 3.67
	δ Aquilæ.....	39.3	52.3	5.7	19.0	32.3	17 5.72		+ 0.48	19.78	+ 19.87	19 17 26.07
	γ Aquilæ.....	51.8	5.5	18.9	32.5	46.1	38 18.96		+ 0.44	19.98	+ 19.87	19 38 39.27
	α Aquilæ.....	11.6	24.8	38.4	51.7	5.2	42 38.34		+ 0.45	19.96	+ 19.88	19 42 58.67

July 18	α Ophiuchi.....	43.0	56.6	10.4	24.0	37.6	27 10.32		+ 0.32	+ 20.05	+ 20.06	17 27 30.70
	51 (Hev.) Cephei S. P. ...	7.5	45.0	22.0	0.5	38.5	22 22.70		+ 3.17	.....	+ 20.07	18 22 45.94
	24 Ursæ Minoris.....	47.5	0.0	10.5	21.0	31.0	30 10.00		- 2.40	.....	+ 20.07	18 30 27.67
	β Lyræ.....	18.8	34.8	50.9	6.7	22.7	43 50.78		+ 0.22	20.05	+ 20.07	18 44 11.07
	ζ Aquilæ.....	15.9	29.6	43.3	56.9	10.6	57 43.26		+ 0.32	20.06	+ 20.07	18 58 3.65
	δ Aquilæ.....	38.9	52.2	5.6	18.8	32.2	17 5.54		+ 0.36	20.09	+ 20.08	19 17 25.98
	γ Aquilæ.....	52.0	5.4	19.0	32.5	46.0	38 18.98		+ 0.33	20.08	+ 20.08	19 38 39.39

July 20	Sun 1 Limb.....	23.4	37.6	52.0	6.2	20.3	54 51.90		+ 0.20	.....	+ 20.58	7 55 12.68
	Sun 2 Limb.....	38.5	.....	7.2	21.3	.....	57 7.08		+ 0.20	.....	+ 20.58	7 57 27.86
	α Ursæ Minoris S. P. ...	7.5	.....	.....	40.0	.....	1 29.30		+ 2.72	.....	+ 20.65	.....
	α Coronæ borealis.....	4.3	19.1	31.0	48.8	3.8	27 34.00		+ 0.18	+ 20.63	+ 20.68	15 27 54.86
	α Serpentis.....	35.5	48.8	2.1	15.4	28.8	36 2.12		+ 0.25	20.69	+ 20.69	15 36 23.06
	β^1 Scorpïi.....	18.7	32.8	47.0	1.1	15.2	55 46.96		+ 0.35	20.64	+ 20.69	15 56 8.00
	δ Ophiuchi.....	9.8	23.3	36.5	49.8	3.2	5 36.52		+ 0.28	20.75	+ 20.69	16 5 57.49
	Saturn 1 Limb Ring.....	31.7	.....	59.8	.....	28.0	8 59.83		+ 0.35	.....	+ 20.69	16 9 20.87
	Saturn 2 Limb Ring.....	.....	48.5	.....	16.7	.....	9 2.60		+ 0.35	.....	+ 20.69	16 9 23.64
	α Scorpïi.....	45.2	0.0	14.7	29.7	44.5	19 14.82		+ 0.38	20.76	+ 20.70	16 19 35.90
	944 Groomb. S. P. ...	31.0	6.0	41.0	16.0	50.5	10 40.90		+ 0.93	.....	+ 20.71	17 11 2.54
	* D. + 34°.52'.....	9.0	25.2	41.5	57.6	13.8	28 41.42		+ 0.15	.....	+ 20.71	17 29 2.28

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpol- ated.	
July 21	(a) β^1 Scorpii.....	18.4	32.6	46.5	0.9	14.7	55 46.62	+ 0.44	+ 20.88	+ 20.86	15 56 7.92
	Saturn 1 Limb Ring.....	.....	38.4	.....	6.6	.....	8 52.50	+ 0.44	.....	+ 20.86	16 9 13.80
	Saturn 2 Limb Ring.....	27.2	.....	55.3	.....	23.5	8 55.33	+ 0.44	.....	+ 20.86	16 9 16.63
	α Scorpii.....	45.2	59.6	14.6	29.4	44.4	19 14.64	+ 0.48	20.83	+ 20.86	16 19 35.98
July 22	Sun 1 Limb.....	.....	.....	51.4	5.6	19.6	2 51.33	+ 0.30	.....	+ 20.79	8 3 12.42
	Sun 2 Limb.....	37.7	52.0	.....	.....	34.6	5 6.17	+ 0.30	.....	+ 20.79	8 5 27.26
	α Bootis.....	31.8	46.0	0.2	14.4	28.5	8 0.18	+ 0.30	+ 20.77	+ 20.77	.....
July 24	α Ursæ Minoris S. P. ....	.....	.....	.....	44.0	56.0	1 33.05	+ 5.36	.....	+ 20.79	13 1 59.20
	ϵ Bootis.....	8.5	23.6	38.5	53.5	8.6	37 38.54	+ 0.20	+ 20.77	+ 20.79	14 37 59.53
	α^2 Libræ.....	12.6	26.3	40.1	53.8	7.7	41 40.10	+ 0.41	20.75	+ 20.79	14 42 1.30
	α Serpentis.....	35.2	48.5	2.0	15.4	28.7	36 1.96	+ 0.30	20.76	+ 20.79	15 36 23.05
	δ Ophiuchi.....	9.8	23.1	36.5	49.7	3.0	5 36.42	+ 0.35	20.75	+ 20.78	16 5 57.55
	Saturn 1 Limb Ring.....	5.2	.....	33.3	.....	1.3	8 33.27	+ 0.44	.....	+ 20.78	16 8 54.49
	Saturn 2 Limb Ring.....	.....	21.8	.....	49.8	.....	8 35.80	+ 0.44	.....	+ 20.78	16 8 57.02
	α Herculis.....	32.7	46.5	0.2	13.8	27.6	7 0.16	+ 0.26	20.90	+ 20.77	17 7 21.19
	λ Sagittarii.....	15.3	30.1	44.8	59.5	14.4	17 44.82	+ 0.48	.....	+ 20.76	18 18 6.06
	51 (Hev.) Cephei S. P.	8.0	.....	24.0	1.5	40.5	22 23.95	+ 3.12	.....	+ 20.76	18 22 47.83
	δ Ursæ Minoris.....	.....	23.0	7.5	.....	.....	24 6.90	- 2.16	.....	+ 20.76	18 24 25.50
	24 Ursæ Minoris.....	46.0	56.0	8.5	19.0	29.0	30 7.70	- 2.45	.....	+ 20.76	18 30 26.01
	Groomb. 1119 S. P.	22.5	46.5	12.5	37.5	1.0	41 12.00	+ 8.64	.....	+ 20.75	18 41 41.39
	σ Sagittarii.....	29.9	44.8	59.7	14.6	29.4	44 59.68	+ 0.49	.....	+ 20.75	18 45 20.92
July 25	Sun 2 Limb.....	.....	.....	1.1	15.2	29.3	17 1.05	+ 0.15	.....	+ 20.59	8 17 21.79
	α Ursæ Minoris S. P.	10.0	22.5	32.5	45.0	56.0	1 33.20	+ 3.04	.....	+ 20.54	13 1 56.78
	α Lyræ.....	37.4	54.6	11.6	28.6	45.5	31 11.54	+ 0.09	+ 20.43	+ 20.47	18 31 32.10
	ζ Aquilæ.....	15.7	29.3	43.1	56.5	.....	57 42.98	+ 0.17	20.51	+ 20.48	18 58 3.63
July 26	Sun 1 Limb.....	15.9	29.6	44.0	58.0	12.1	18 43.92	+ 0.16	.....	+ 20.85	8 19 4.93
	Sun 2 Limb.....	29.7	43.6	57.8	12.0	26.2	20 57.86	+ 0.16	.....	+ 20.85	8 21 18.87
	12 Canum Venat.	35.7	52.8	9.8	27.0	44.2	48 9.90	+ 0.08	+ 20.97	+ 20.97	.....
	α Ursæ Minoris S. P. ....	.....	.....	32.0	.....	.....	1 32.30	+ 4.16	.....	+ 20.97	.....
July 27	Venus 1 Limb.....	10.2	23.7	37.0	50.2	3.7	20 36.96	+ 0.30	.....	+ 20.98	11 20 58.24
	β Leonis.....	3.2	16.8	30.6	44.5	58.3	40 30.68	+ 0.25	+ 20.96	+ 20.98	11 40 51.91
	12 Canum Venat.	35.6	52.5	9.7	26.9	44.1	48 9.76	+ 0.13	21.05	+ 20.98	12 48 30.87
	Mars 1 Limb.....	43.4	56.4	10.1	23.6	37.0	0 10.10	+ 0.36	.....	+ 20.98	13 0 31.44
	α Ursæ Minoris S. P.	10.5	22.5	33.0	44.5	56.0	1 33.30	+ 5.72	.....	+ 20.98	13 2 0.00
	α Herculis.....	32.4	46.4	0.0	13.6	27.6	7 0.00	+ 0.25	21.05	+ 20.99	17 7 21.24
	α Ophiuchi.....	42.2	55.6	9.4	23.1	36.6	27 9.38	+ 0.26	21.01	+ 20.99	17 27 30.63
	δ Ursæ Minoris.....	.....	21.0	.....	.....	.....	24 4.60	- 2.34	.....	+ 20.99	18 24 23.25
	α Lyræ.....	37.1	53.9	11.0	28.2	45.3	31 11.10	+ 0.13	20.81	+ 20.99	18 31 32.22
July 29	Sun 1 Limb.....	3.8	.....	.....	45.9	59.8	30 31.81	+ 0.23	.....	+ 21.15	8 30 53.19
	Sun 2 Limb.....	17.2	31.4	45.5	59.7	13.8	32 45.52	+ 0.23	.....	+ 21.15	8 33 6.90
INSTRUMENT REVERSED.											
July 30	Venus 1 Limb.....	51.5	4.7	18.1	31.2	44.7	27 18.04	+ 0.17	.....	+ 21.16	11 27 39.37
	12 Canum Venat.	35.5	52.7	9.8	27.0	44.1	48 9.82	- 0.10	+ 21.18	+ 21.17	12 48 30.89
	α Ursæ Minoris S. P.	58.5	10.5	22.0	.....	.....	1 21.63	+ 16.58	.....	+ 21.17	.....
	α Herculis.....	32.4	46.3	59.8	13.6	27.5	6 59.92	+ 0.10	21.27	+ 21.19	17 7 21.21
	α Ophiuchi.....	42.2	55.7	9.5	23.1	36.7	27 9.44	+ 0.11	21.10	+ 21.20	17 27 30.75
	β Geminorum.....	36.8	51.9	7.1	22.3	37.4	35 7.10	- 0.08	+ 21.34	+ 21.35	7 35 28.37
July 30	Sun 1 Limb.....	58.8	13.0	27.0	41.0	55.0	34 26.96	- 0.03	.....	+ 21.37	8 34 48.30
(a) July 21. at 12 ^h . Applied four pieces of brass to the jar of the pendulum.											

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
July 30	Sun 2 Limb	<i>s.</i> 12.2	<i>s.</i> 26.1	<i>s.</i> 40.1	<i>s.</i> 54.2	<i>s.</i> 8.3	<i>m.</i> 36	<i>s.</i> 40.18	<i>s.</i> - 0.03	<i>s.</i>	<i>s.</i> +21.37	<i>h. m. s.</i> 8 37 1.52
	Mercury 1 Limb.....	51.3	4.7	18.2	31.8	45.3	19	18.26	+ 0.01	.....	+21.38	10 19 39.65
	Venus 1 Limb.....	8.8	22.0	35.4	48.7	2.1	30	35.40	+ 0.03	.....	+21.40	11 30 56.83
	β Leonis	2.9	16.7	30.5	44.4	58.1	40	30.52	- 0.02	+21.37	+21.40	11 40 51.90
	12 Canum Venat.	35.3	52.5	9.7	26.8	43.9	48	9.64	- 0.16	21.41	+21.41	12 48 30.89
	α Ursæ Minoris S. P. ....	.....	12.0	24.0	36.0	47.5	1	24.20	+13.13	.....	+21.41	13 1 58.74
	η Bootis.....	13.5	27.6	41.6	55.8	9.8	46	41.66	- 0.03	21.38	+21.42	13 47 3.05
	α Bootis	31.6	45.6	59.7	13.8	28.0	7	59.74	- 0.04	21.45	+21.42	14 8 21.12
	δ Ophionchi	9.4	22.6	35.8	49.2	2.6	5	35.92	+ 0.06	21.49	+21.44	16 5 57.42
	51 (Hev.) Cephei S. P.	8.0	45.0	24.5	2.0	.....	22	23.92	+ 7.52	.....	+21.47	18 22 52.91
	δ Ursæ Minoris.....	36.0	20.0	.....	.....	.....	24	3.10	- 5.67	.....	+21.47	18 24 18.90
	24 Ursæ Minoris.....	.....	53.5	5.5	.....	26.5	30	4.90	- 6.41	.....	+21.47	18 30 19.96
Aug. 1	Sun 1 Limb.....	46.6	0.5	14.6	28.6	42.7	42	14.60	+ 0.01	.....	+21.84	8 42 36.45
	Sun 2 Limb.....	59.7	13.8	27.8	41.8	55.8	44	27.78	+ 0.01	.....	+21.84	8 44 49.63
	Venus 1 Limb.....	.....	.....	.....	17.0	30.4	37	3.72	+ 0.09	.....	+21.86	11 37 25.67
	ζ Aquilæ.....	14.5	27.9	41.6	55.6	.....	57	41.73	+ 0.03	+21.90	+21.94	18 58 3.70
	δ Aquilæ.....	37.4	50.8	4.1	17.5	30.7	17	4.10	+ 0.09	21.87	+21.94	19 17 26.13
	γ Aquilæ.....	.....	.....	17.4	31.0	44.4	38	17.44	+ 0.05	21.98	+21.94	19 38 39.43
	α Aquilæ.....	9.8	23.5	36.7	50.2	3.6	42	36.76	+ 0.06	22.03	+21.94	19 42 58.76
Aug. 2	Sun 1 Limb.....	39.6	53.7	7.7	21.8	35.8	46	7.72	+ 0.05	.....	+21.88	8 46 29.65
	Sun 2 Limb.....	.....	.....	.....	.....	48.8	48	20.81	+ 0.05	.....	+21.88	8 48 42.74
	51 (Hev.) Cephei S. P.	5.5	42.5	22.0	58.5	.....	22	21.18	+ 9.71	.....	+21.84	18 22 52.73
	δ Ursæ Minoris.....	37.5	21.0	6.0	.....	.....	24	4.97	- 7.26	.....	+21.84	.....
	24 Ursæ Minoris.....	46.5	58.5	9.0	19.0	31.0	30	8.80	- 8.19	.....	+21.84	18 30 22.45
	α Lyrae.....	.....	53.3	10.4	27.4	44.2	31	10.32	- 0.13	+21.81	+21.84	18 31 32.03
	Groomb. 1119 S. P. ....	.....	44.0	7.5	27.5	51.0	41	6.10	+27.48	.....	+21.84	18 41 55.42
	β Lyrae.....	17.5	33.3	49.2	5.1	21.1	43	49.24	- 0.07	21.83	+21.84	18 44 11.01
	ζ Aquilæ.....	14.4	28.1	41.7	55.4	9.2	57	41.76	+ 0.07	21.83	+21.84	18 58 3.67
	δ Aquilæ.....	37.5	50.7	4.1	17.3	30.5	17	4.02	+ 0.14	21.90	+21.85	19 17 26.01
	Moon 2 Limb.....	3.7	18.4	33.1	47.9	2.8	12	33.18	- 0.02	.....	+22.05	3 12 55.21
	η Tauri.....	6.5	20.7	35.2	49.7	4.5	37	35.32	- 0.02	+22.06	+22.06	.....
	37 Tauri.....	22.4	36.6	50.8	5.2	19.6	54	50.92	- 0.01	.....	+22.06	3 55 12.97
Aug. 3	Moon 2 Limb	39.8	55.0	10.2	25.5	40.8	15	10.26	- 0.05	.....	+22.40	4 15 32.61
	α Tauri.....	52.9	6.7	20.6	34.4	48.4	26	20.60	+ 0.03	+22.33	+22.41	4 26 43.04
	α Aurigæ.....	49.7	8.8	27.8	46.9	6.0	4	27.84	- 0.23	22.49	+22.41	5 4 50.02
Aug. 5	Sun 2 Limb.....	.....	41.2	55.3	.....	.....	55	55.22	+ 0.02	.....	+22.83	8 56 18.07
	Venus 1 Limb.....	.....	.....	.....	48.0	1.2	49	34.63	+ 0.12	.....	+22.87	11 49 57.62
	η Bootis.....	11.6	26.0	39.9	54.1	8.3	46	39.98	+ 0.01	+22.94	+22.89	13 47 2.88
	α Coronæ borealis.....	1.9	16.8	31.8	46.7	1.7	27	31.78	- 0.05	22.85	+22.92	15 27 54.65
	α Serpentis	33.2	46.6	59.9	13.3	26.7	35	59.94	+ 0.08	22.87	+22.92	15 36 22.94
	δ Aquilæ.....	36.4	49.6	2.8	16.1	29.5	17	2.88	+ 0.11	23.07	+22.93	19 17 25.92
	γ Aquilæ.....	49.5	3.0	16.4	29.9	43.4	38	16.44	+ 0.06	22.98	+22.93	19 38 39.43
Aug. 7	Sun 1 Limb.....	.....	9.7	23.8	37.7	51.7	5	23.78	0.00	.....	+22.78	9 5 46.56
	Sun 2 Limb.....	8.0	22.1	35.8	49.7	3.7	7	35.86	0.00	.....	+22.78	9 7 58.64
	β Libræ	33.4	47.0	0.5	14.0	27.5	8	0.48	+ 0.13	+22.72	+22.76	15 8 23.37
	α Coronæ borealis	2.2	16.8	31.8	46.9	1.8	27	31.90	- 0.07	22.72	+22.76	15 27 54.59
	α Herculis.....	31.0	44.7	58.5	12.3	25.9	6	58.48	+ 0.02	22.69	+22.75	17 7 21.25
	α Ophionchi	40.5	54.2	7.8	21.4	34.9	27	7.76	+ 0.03	22.78	+22.75	17 27 30.54
	51 (Hev.) Cephei S. P.	7.0	45.5	23.0	1.0	39.0	22	23.10	+ 8.61	.....	+22.76	18 22 54.47
	δ Ursæ Minoris	34.5	19.0	1.0	.....	.....	21	1.67	- 6.48	.....	+22.76	.....
	24 Ursæ Minoris.....	42.0	54.0	4.0	14.5	25.5	30	4.00	- 7.31	.....	+22.76	18 30 19.45
	Groomb. 1119 S. P.	27.0	55.5	17.5	.....	.....	41	15.50	+24.41	.....	+22.76	18 42 2.67
	β Lyrae	16.4	32.5	48.2	4.1	19.9	43	48.22	- 0.10	22.84	+22.76	18 44 10.88

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
Aug. 8	Sun 1 Limb.....	45.3	59.3	13.2	27.1	41.1	9 13.20	+ 0.04	.....	+ 22.87	9 9 36.11
	Mercury 1 Limb.....	15.8	29.2	42.5	55.8	9.1	51 42.48	+ 0.10	.....	+ 22.88	10 52 5.46
	β Leonis.....	1.2	15.1	28.8	42.7	56.6	40 28.88	+ 0.04	+ 22.91	+ 22.89	11 40 51.81
	12 Canum Venat.....	33.7	50.8	8.0	25.1	42.3	48 7.98	- 0.13	22.91	+ 22.89	12 48 30.74
	α Ursæ Minoris S. P.	4.0	16.0	26.5	39.0	50.0	1 27.10	+ 15.81	.....	+ 22.90	13 2 5.31
	Mars 1 Limb.....	4.3	17.8	31.5	44.8	58.5	26 31.38	+ 0.17	.....	- 22.90	13 26 54.45
	α Coronæ borealis	1.8	16.7	31.6	46.6	1.6	27 31.66	- 0.04	22.91	+ 22.92	15 27 54.54
	α Serpentis.....	33.2	46.5	59.8	13.3	26.7	35 59.90	+ 0.09	22.86	+ 22.92	15 36 22.91
	α Herculis.....	30.6	44.5	58.3	11.9	25.6	6 58.18	+ 0.05	22.95	+ 22.94	17 7 21.17
	δ Ursæ Minoris.....	34.0	18.5	59.0	.....	28.0	24 0.80	- 6.77	.....	+ 22.96	18 24 16.99
	Groomb. 1119 S. P. ..	32.5	2.0	23.0	45.0	9.0	41 22.30	+ 25.65	.....	+ 22.97	18 42 10.92
Aug. 9	12 Canum Venat.	33.6	50.6	7.8	24.9	42.1	48 7.80	- 0.12	+ 23.07	+ 23.24	12 48 30.92
	α Ursæ Minoris S. P.	5.0	17.0	.....	40.0	.....	1 28.43	+ 15.82	.....	+ 23.25	.....
	α Coronæ borealis	1.5	16.4	31.3	46.2	1.0	27 31.28	- 0.03	23.27	+ 23.28	15 27 54.53
	α Ophiuchi.....	40.0	53.7	7.2	20.9	34.6	27 7.28	+ 0.08	23.19	+ 23.31	17 27 30.67
	α Lyrae.....	34.2	51.2	8.4	25.5	42.6	31 8.38	- 0.12	23.66	+ 23.33	18 31 31.59
	ζ Aquilæ.....	12.8	26.6	40.3	54.1	7.6	57 40.28	+ 0.07	23.29	+ 23.34	18 58 3.69
Aug. 10	Sun 1 Limb.....	.....	.....	.....	4.0	18.0	16 50.24	+ 0.08	.....	+ 23.56	9 17 13.88
Aug. 12	α Ophiuchi.....	38.7	52.4	6.0	19.6	33.2	27 5.98	+ 0.13	+ 24.40	+ 24.46	17 27 30.57
	δ Ursæ Minoris.....	31.5	15.5	0.5	.....	25.0	23 59.02	- 7.04	.....	+ 24.47	.....
	Groomb. 1119 S. P. ..	34.0	56.0	17.0	38.5	2.0	41 17.50	+ 26.93	.....	+ 24.48	18 42 8.91
	β Lyrae.....	14.3	30.4	46.4	2.2	18.1	43 46.28	- 0.02	24.65	+ 24.48	18 44 10.74
	ζ Aquilæ.....	11.6	25.4	39.2	52.7	6.4	57 39.06	+ 0.12	24.44	+ 24.48	18 58 3.66
	γ Aquilæ.....	47.8	1.3	15.0	28.5	41.8	38 14.88	+ 0.14	24.45	+ 24.50	19 38 39.52
	β Aquilæ.....	36.2	49.5	2.9	16.3	29.6	47 2.90	+ 0.16	24.45	+ 24.51	19 47 27.57
Aug. 13	Sun 1 Limb.....	43.3	57.2	.....	.....	.....	28 10.92	- 0.06	.....	+ 24.92	9 28 35.78
	δ Ursæ Minoris.....	.....	10.0	55.0	42.0	.....	23 55.67	- 4.57	.....	+ 25.20	.....
	α Lyrae.....	32.7	49.8	7.0	24.0	40.9	31 6.88	- 0.16	+ 25.14	+ 25.21	18 31 31.93
	β Lyrae.....	13.9	30.1	45.8	1.6	17.5	43 45.78	- 0.13	25.25	+ 25.21	18 44 10.86
	γ Aquilæ.....	47.3	0.8	14.2	27.8	41.3	38 14.28	- 0.05	25.24	+ 25.24	19 38 39.47
	α Aquilæ.....	6.7	20.1	33.6	47.1	0.4	42 33.58	- 0.04	25.32	+ 25.24	19 42 58.78
	β Aquilæ.....	35.5	49.0	2.3	15.7	29.2	47 2.34	- 0.04	25.21	+ 25.24	19 47 27.54
Aug. 18	(a) Moon 1 Limb.....	1.7	17.0	32.4	48.0	3.7	32 32.56	+ 0.23	.....	+ 27.52	16 33 0.31
	α Herculis.....	26.1	39.7	53.4	7.3	21.0	6 53.50	+ 0.08	+ 27.47	+ 27.53	17 7 21.11
	θ Ophiuchi.....	13.6	28.3	43.0	57.7	12.4	11 43.00	+ 0.23	.....	+ 27.53	17 12 10.76
	α Lyrae.....	30.2	47.2	4.1	21.2	38.3	31 4.20	- 0.07	27.66	+ 27.56	18 31 31.69
	β Lyrae.....	11.6	27.5	43.3	59.2	15.1	43 43.34	- 0.03	27.53	+ 27.56	18 44 10.87
Aug. 19	δ Ursæ Minoris.....	24.0	11.0	54.0	.....	.....	23 53.23	- 6.94	.....	+ 27.92	.....
	α Lyrae.....	29.8	46.8	3.8	.....	.....	31 3.80	+ 0.03	+ 27.95	+ 27.92	18 31 31.75
	ζ Aquilæ.....	8.3	21.7	35.5	49.1	2.7	57 35.46	+ 0.22	27.90	+ 27.93	18 58 3.61
	δ Aquilæ.....	31.3	44.5	57.8	11.2	24.4	16 57.84	+ 0.29	27.89	+ 27.93	19 17 26.06
	α Aquilæ.....	3.8	17.2	30.6	44.1	57.5	42 30.61	+ 0.26	27.95	+ 27.94	19 42 58.84
	β Aquilæ.....	32.5	45.8	59.3	12.6	26.1	46 59.26	+ 0.26	27.98	+ 27.95	19 47 27.47
Aug. 20	Sun 1 Limb.....	51.1	5.0	19.1	32.9	46.5	54 18.92	+ 0.01	.....	+ 28.42	9 54 47.35
	Sun 2 Limb.....	1.7	15.6	29.3	43.0	56.8	56 29.28	+ 0.01	.....	+ 28.42	9 56 57.71
	α Herculis.....	25.0	38.5	52.3	6.2	20.0	6 52.40	0.00	+ 28.62	+ 28.65	17 7 21.05
	α Ophiuchi.....	34.6	48.3	1.8	15.3	29.1	27 1.82	+ 0.01	28.59	+ 28.66	17 27 30.49
	δ Ursæ Minoris.....	22.0	5.0	48.5	36.5	.....	23 49.75	- 4.51	.....	+ 28.70	.....
	Moon 1 Limb.....	19.3	34.9	50.5	6.2	21.8	28 50.54	+ 0.11	.....	+ 28.70	18 29 19.35
	σ Sagittarii.....	22.1	36.7	51.5	6.5	21.3	44 51.62	+ 0.09	.....	+ 28.71	18 45 20.42
	τ Sagittarii.....	58.1	12.8	28.1	43.2	58.0	56 28.04	+ 0.09	.....	+ 28.71	18 56 56.84

(a) Very faint.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
Aug. 20	δ Aquilæ.....	30.5	44.1	57.2	10.4	23.8	16 57.20	+ 0.04	+28.77	+28.72	19 17 25.96
	γ Aquilæ	43.6	57.2	10.6	24.2	37.7	38 10.66	+ 0.01	28.77	+28.72	19 38 39.39
	α Aquilæ	3.1	16.5	30.1	43.4	57.0	42 30.02	+ 0.02	28.80	+28.72	19 42 58.76
	β Aquilæ	32.2	45.4	58.7	12.1	25.4	46 58.76	+ 0.02	28.72	+28.72	19 47 27.50
Aug. 21	Sun 1 Limb.....	33.6	47.2	1.0	14.6	28.2	58 0.92	+ 0.20	.....	+28.91	9 58 30.03
	Sun 2 Limb.....	43.7	57.3	11.0	24.6	38.2	0 10.96	+ 0.20	.....	+28.91	10 0 40.07
	Venus 1 Limb.....	15.0	28.4	41.7	55.1	8.6	32 41.76	+ 0.32	.....	+28.94	12 33 11.02
	12 Canum Venat.	27.6	44.6	1.8	19.0	36.0	48 1.80	- 0.01	+28.81	+28.95	12 48 30.74
	α Ursæ Minoris S. P.	7.5	17.5	29.0	40.0	52.5	1 29.30	+17.07	.....	+28.95	.....
	α Serpentis.....	26.6	40.1	53.4	6.8	20.3	35 53.44	+ 0.24	28.99	+28.99	15 36 22.67
	δ Aquilæ.....	30.1	43.3	56.6	9.8	23.1	16 56.58	+ 0.27	29.16	+29.05	19 17 25.90
	γ Aquilæ	43.3	56.6	10.2	23.7	37.2	38 10.20	+ 0.22	29.02	+29.06	19 38 39.48
	α Aquilæ	2.6	16.2	29.5	43.1	56.4	42 29.56	+ 0.23	29.05	+29.06	19 42 58.85
Aug. 22	Sun 1 Limb.....	15.1	28.7	42.3	56.1	9.6	1 42.36	+ 0.22	.....	+29.35	10 2 11.93
	Sun 2 Limb.....	24.8	38.5	51.9	5.7	19.5	3 52.08	+ 0.22	.....	+29.35	10 4 21.65
	α Ursæ Minoris S. P.	.....	.....	.....	40.0	.....	1 28.30	+17.83	.....	+29.42	.....
	α Lyræ.....	28.2	.....	2.2	.....	.....	31 2.20	0.00	+29.53	+29.53	.....
Aug. 24	α Serpentis.....	25.2	38.7	52.1	5.5	18.8	35 52.06	+ 0.08	+30.49	+30.59	15 36 22.73
	δ Ursæ Minoris.....	.....	.....	48.0	32.0	13.5	23 47.67	- 5.79	.....	+30.65	.....
	β Lyræ	8.5	24.4	40.2	56.1	12.0	43 40.24	- 0.06	30.57	+30.66	18 44 10.84
	α Aquilæ	1.3	14.5	28.1	41.5	54.9	42 28.06	+ 0.08	30.68	+30.67	19 42 58.81
	β Aquilæ	29.9	43.3	56.7	10.1	23.4	46 56.68	+ 0.08	30.72	+30.67	19 47 27.43
	α^2 Capricorni	12.4	26.3	39.7	53.3	7.0	8 39.74	+ 0.15	30.82	+30.68	20 9 10.57
	Uranus	58.1	.....	.....	37.8	51.4	5 24.64	+ 0.13	.....	+30.71	23 5 55.48
Aug. 26	Sun 1 Limb.....	.....	.....	.....	37.9	51.4	16 24.33	+ 0.19	.....	+31.11	10 16 55.63
	Sun 2 Limb.....	.....	20.0	.....	.....	.....	18 33.54	+ 0.19	.....	+31.11	10 19 4.84
	Venus 1 Limb.....	43.7	57.3	10.8	24.4	37.8	43 10.80	+ 0.31	.....	+31.14	12 43 42.25
	12 Canum Venat.	25.3	42.4	59.6	16.6	33.7	47 59.52	- 0.05	+31.08	+31.14	12 48 30.61
	α Ursæ Minoris S. P.	.....	.....	.....	.....	53.5	1 29.60	+18.16	.....	+31.14	13 2 18.90
	α Coronæ borealis ...	53.1	8.1	23.0	37.8	52.8	27 22.96	+ 0.06	31.20	+31.17	15 27 54.19
	α Serpentis.....	24.4	37.7	51.2	4.6	18.0	35 51.18	+ 0.21	31.21	+31.17	15 36 22.56
	δ Ursæ Minoris.....	21.5	5.5	48.5	32.5	16.0	23 48.80	- 7.65	.....	+31.22	18 24 12.37
	β Lyræ.....	7.7	23.5	39.5	55.5	11.3	43 39.50	+ 0.02	31.20	+31.22	18 44 10.74
	ζ Aquilæ.....	4.7	18.5	32.2	45.7	59.5	57 32.12	+ 0.17	31.21	+31.23	18 58 3.52
	λ Piscium.....	55.4	8.6	21.8	35.1	48.4	33 21.86	+ 0.25	.....	+31.31	23 33 53.42
	29 Piscium.....	39.6	53.0	6.3	19.6	33.0	53 6.30	+ 0.28	.....	+31.31	23 53 37.89
	Moon 2 Limb	54.7	8.4	22.1	35.7	49.3	6 22.04	+ 0.26	.....	+31.32	0 6 53.62
	δ Piscium.....	25.0	38.4	51.7	5.2	18.5	39 51.76	+ 0.21	.....	+31.32	0 40 23.29
Aug. 27	Venus 1 Limb.....	36.4	49.8	3.3	16.8	30.3	45 3.32	+ 0.30	.....	+31.54	12 45 35.16
	12 Canum Venat.	24.8	41.8	59.0	16.2	33.4	47 59.04	- 0.05	+31.55	+31.54	12 48 30.53
	α Serpentis.....	24.1	37.5	50.8	4.4	17.7	35 50.90	+ 0.20	31.49	+31.58	15 36 22.68
	β Lyræ.....	7.2	23.3	39.1	54.7	10.7	43 39.00	+ 0.01	31.70	+31.65	18 44 10.66
	ζ Aquilæ	4.4	17.8	31.5	45.3	58.9	57 31.58	+ 0.17	31.74	+31.65	18 58 3.40
	δ Aquilæ	27.6	40.8	54.2	7.4	20.7	16 54.14	+ 0.24	31.58	+31.66	19 17 26.04
	Uranus.....	31.0	44.4	58.0	11.3	24.6	4 57.86	+ 0.29	.....	+31.74	23 5 29.89
Aug. 29	α Ophiuchi	30.4	43.8	57.4	11.2	24.6	26 57.48	+ 0.17	+32.64	+32.69	17 27 30.34
	δ Ursæ Minoris.....	18.5	2.0	45.0	29.0	12.5	23 45.40	- 7.49	.....	+32.71	.....
	ζ Aquilæ.....	3.4	17.1	30.5	44.3	57.8	57 30.62	+ 0.17	32.68	+32.73	18 58 3.52
	γ Aquilæ	39.4	52.9	6.5	19.8	33.4	38 6.40	+ 0.19	32.80	+32.74	19 38 39.33
	α Aquilæ	59.0	12.5	25.9	39.3	52.6	42 25.86	+ 0.20	32.73	+32.74	19 42 58.80
	β Aquilæ	27.7	41.1	54.5	7.8	21.2	46 54.46	+ 0.21	32.79	+32.74	19 47 27.41

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Aug. 30	Sun 1 Limb	32.4	45.7	59.5	13.0	26.7	30	59.46	+ 0.19	.....	+ 33.03	10 31 32.68
	Sun 2 Limb	41.2	54.7	8.3	21.7	35.3	33	8.24	+ 0.19	.....	+ 33.03	10 33 41.46
	β Leonis	51.0	5.0	18.5	32.4	46.4	40	18.66	+ 0.15	+ 32.98	+ 33.06	11 40 51.87
	α Ursæ Minoris S. P.	5.0	.....	.....	.....	54.0	1	29.50	+ 17.78	.....	+ 33.08	13 2 20.36
	α Herculis	20.1	33.7	47.5	1.4	15.1	6	47.56	+ 0.16	33.15	+ 33.16	17 7 20.88
	δ Ursæ Minoris	17.5	1.0	44.5	28.0	.....	23	44.52	- 7.49	.....	+ 33.18	18 24 10.21
	β Lyræ	5.7	21.4	37.3	53.2	9.2	43	37.36	+ 0.01	33.29	+ 33.19	18 44 10.56
Aug. 31	δ Ursæ Minoris	16.0	0.0	43.5	26.5	11.0	23	43.40	- 7.18	.....	+ 33.62	.....
	β Lyræ	5.3	21.2	37.1	53.0	8.8	43	37.08	0.00	+ 33.56	+ 33.62	18 44 10.70
	ζ Aquilæ	2.4	16.0	29.7	43.4	57.1	57	29.72	+ 0.15	33.57	+ 33.63	18 58 3.50
	δ Aquilæ	25.5	38.8	52.1	5.4	18.7	16	52.10	+ 0.22	33.61	+ 33.63	19 17 25.95
	γ Aquilæ	38.5	52.1	5.5	19.1	32.5	38	5.54	+ 0.17	33.66	+ 33.63	19 38 39.34
	α Aquilæ	57.9	11.4	25.0	38.3	51.7	42	24.86	+ 0.18	33.73	+ 33.63	19 42 58.67
Sept. 1	α Aurigæ	29.6	58.7	17.7	36.8	56.0	4	17.76	- 0.13	+ 33.67	+ 33.68	5 4 51.31
	β Orionis	49.4	2.8	16.3	29.5	43.2	6	16.24	+ 0.25	33.69	+ 33.68	5 6 50.17
	β Tauri	5.8	20.8	36.0	51.1	6.3	15	36.00	+ 0.04	33.61	+ 33.68	5 16 9.72
	δ Orionis	48.5	1.8	15.3	28.4	41.6	23	15.12	+ 0.21	33.71	+ 33.68	5 23 49.01
	ϵ Orionis	4.4	17.5	30.7	44.1	57.4	27	30.82	+ 0.22	33.72	+ 33.68	5 28 4.72
	136 Tauri	11.4	26.5	41.4	56.3	11.4	42	41.40	+ 0.05	.....	+ 33.67	5 43 15.12
	Moon 2 Limb	12.3	27.8	43.4	58.9	14.5	5	43.38	+ 0.06	.....	+ 33.67	6 6 17.11
	δ Ursæ Minoris S. P.	1.0	44.5	28.5	11.5	55.5	23	28.20	+ 7.42	.....	+ 33.66	6 24 9.28
	ϵ Geminorum	0.5	15.1	29.6	44.5	59.2	33	29.78	+ 0.06	.....	+ 33.66	6 34 3.50
Sept. 2	α Herculis	19.9	33.5	47.4	1.1	14.8	6	47.34	+ 0.13	+ 33.35	+ 33.44	17 7 20.91
	α Ophiuchi	29.6	43.2	56.6	10.4	23.8	26	56.72	+ 0.14	33.37	+ 33.43	17 27 30.29
	δ Ursæ Minoris	16.0	59.0	42.0	27.0	10.0	23	42.80	- 6.70	.....	+ 33.40	18 24 9.50
	β Lyræ	5.5	21.4	37.3	53.1	8.9	43	37.24	+ 0.01	33.35	+ 33.39	18 44 10.64
	ζ Aquilæ	2.6	16.2	29.7	43.5	57.3	57	29.86	+ 0.14	33.42	+ 33.38	18 58 3.38
	δ Aquilæ	25.6	38.8	52.3	5.6	18.8	16	52.22	+ 0.20	33.49	+ 33.37	19 17 25.79
	Uranus	36.8	50.2	3.5	16.8	30.3	4	3.52	+ 0.24	.....	+ 33.24	23 4 37.00
	δ Ursæ Minoris S. P.	1.0	45.0	28.5	12.0	56.0	23	28.50	+ 7.78	.....	+ 32.90	6 24 9.18
	ω^1 Geminorum .....	.....	50.5	5.1	.....	34.2	52	5.07	+ 0.09	.....	+ 32.89	6 52 38.05
	Moon 2 Limb	51.4	6.7	22.1	37.5	52.7	9	22.08	+ 0.08	.....	+ 32.87	7 9 55.03
	ν Geminorum	58.8	13.7	28.6	43.6	58.5	25	28.64	+ 0.06	.....	+ 32.86	7 26 1.56
	α Canis Minoris	53.8	7.4	20.5	33.9	47.4	30	20.60	+ 0.21	+ 32.91	+ 32.85	7 30 53.66
	β Geminorum	26.1	41.2	56.2	11.4	26.5	34	56.28	+ 0.06	32.85	+ 32.85	7 35 29.19
Sept. 3	Sun 1 Limb	4.9	18.3	31.8	45.3	58.7	45	31.80	+ 0.20	.....	+ 32.70	10 46 4.70
	Sun 2 Limb	13.4	26.8	40.2	53.7	7.2	47	40.26	+ 0.20	.....	+ 32.70	10 48 13.16
	12 Canum Venat.	23.5	40.7	57.8	15.0	32.3	47	57.86	- 0.04	32.66	+ 32.60	12 48 30.42
	Venus 1 Limb	21.2	35.1	48.8	2.4	15.8	55	48.66	+ 0.29	.....	+ 32.59	12 56 21.54
	α Ursæ Minoris S. P.	9.0	.....	32.0	.....	56.0	1	32.20	+ 16.69	.....	+ 32.59	13 2 21.48
	β Lyræ	6.6	22.5	38.3	54.2	10.1	43	38.34	+ 0.02	32.23	+ 32.28	18 44 10.64
	ζ Aquilæ	3.7	17.4	31.1	44.5	58.3	57	31.00	+ 0.16	32.24	+ 32.27	18 58 3.43
	δ Aquilæ	26.6	40.1	53.4	6.7	20.0	16	53.36	+ 0.23	32.30	+ 32.26	19 17 25.85
	γ Aquilæ	39.9	53.4	6.8	20.4	34.0	38	6.90	+ 0.18	32.25	+ 32.24	19 38 39.32
	Uranus	29.2	42.6	56.1	9.5	22.8	3	56.04	+ 0.27	.....	+ 32.05	23 4 28.36
Sept. 4	α Ursæ Minoris S. P. ....	.....	.....	.....	.....	0.0	1	35.50	+ 16.30	.....	+ 31.05	13 2 22.85
	η Bootis	3.5	17.4	31.4	45.4	59.5	46	31.44	+ 0.11	+ 31.04	+ 31.01	13 47 2.56
	α Herculis	22.4	36.2	49.7	3.5	17.3	6	49.82	+ 0.14	30.83	+ 30.87	17 7 20.83
	α Ophiuchi	32.0	45.5	59.3	12.8	26.5	26	59.22	+ 0.15	30.82	+ 30.86	17 27 30.23
	δ Ursæ Minoris	17.5	1.5	44.0	28.0	11.0	23	44.40	- 6.86	.....	+ 30.82	18 21 8.36
	β Lyræ	7.9	23.8	39.6	55.6	11.6	43	39.70	+ 0.01	30.86	+ 30.81	18 44 10.52
	ζ Aquilæ	5.0	18.8	32.4	46.2	59.7	57	32.42	+ 0.15	30.82	+ 30.80	18 58 3.37
	Uranus	21.8	35.3	48.6	2.1	15.4	3	48.64	+ 0.25	.....	+ 30.67	23 4 19.56

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.			observed.	interpo- lated.	
Sept. 5	β Lyrae.....	8.4	24.2	40.1	56.1	11.8	43 40.12	+ 0.01	+ 30.42	+ 30.45	18 44 10.58
	ζ Aquilae.....	5.3	19.2	32.8	46.5	0.2	57 32.80	+ 0.15	30.43	+ 30.45	18 58 3.40
	δ Aquilae.....	28.6	42.1	55.2	8.5	21.8	16 55.24	+ 0.22	30.41	+ 30.45	19 17 25.91
	γ Aquilae.....	41.5	55.1	8.7	22.1	35.6	38 8.60	+ 0.17	30.54	+ 30.45	19 38 39.22
	α Aquilae.....	1.2	14.6	28.1	41.5	55.0	42 28.08	+ 0.18	30.46	+ 30.45	19 42 58.71
	Uranus.....	13.0	26.4	39.7	53.1	6.4	3 39.72	+ 0.26	.....	+ 30.47	23 4 10.45
Sept. 6	Sun 1 Limb.....	58.3	11.6	25.0	.....	51.5	56 24.95	+ 0.21	.....	+ 30.74	10 56 55.90
	Sun 2 Limb.....	.....	.....	33.3	46.5	0.1	58 33.23	+ 0.21	.....	+ 30.74	10 59 4.18
	α Ursae Minoris S. P.	.....	.....	.....	48.0	.....	1 35.80	+ 17.07	.....	+ 30.78	.....
	α Coronae borealis.....	53.4	8.2	23.1	38.0	53.0	27 23.14	+ 0.07	+ 30.82	+ 30.82	.....
Sept. 7	η Bootis.....	3.2	17.2	31.3	45.3	59.4	46 31.28	+ 0.16	+ 31.12	+ 31.13	13 47 2.57
	α Bootis.....	21.1	.....	.....	3.5	17.5	7 49.32	+ 0.15	31.17	+ 31.13	14 8 20.60
	δ Ophiuchi.....	58.8	12.4	25.6	38.9	52.3	5 25.60	+ 0.30	31.05	+ 31.17	16 5 57.07
	ζ Pegasi.....	30.8	44.4	58.0	11.5	25.1	32 57.96	+ 0.22	31.26	+ 31.28	22 33 29.46
	α Pegasi.....	49.2	2.8	16.5	30.3	44.1	56 16.58	+ 0.19	31.39	+ 31.29	22 56 48.06
	Uranus.....	54.5	7.7	21.1	34.5	47.8	3 21.12	+ 0.32	.....	+ 31.29	23 3 52.73
Sept. 9	Sun 1 Limb.....	46.2	59.7	12.9	26.1	39.5	7 12.88	+ 0.24	.....	+ 32.17	11 7 45.29
	Sun 2 Limb.....	54.2	7.6	20.8	34.2	47.6	9 20.88	+ 0.24	.....	+ 32.17	11 9 53.29
	β Lyrae.....	.....	22.1	38.2	54.0	.....	43 38.10	+ 0.04	+ 32.33	+ 32.42	18 44 10.56
	α Aquarii.....	35.2	48.4	1.5	14.8	28.3	57 1.64	+ 0.29	32.46	+ 32.48	21 57 34.41
	ζ Pegasi.....	30.0	43.4	56.8	10.2	23.6	32 56.80	+ 0.22	32.43	+ 32.50	22 33 29.52
	α Pegasi.....	47.8	1.6	15.4	29.1	42.7	56 15.32	+ 0.19	32.66	+ 32.51	22 56 48.02
	Uranus.....	35.6	48.8	2.1	15.5	28.8	3 2.16	+ 0.32	.....	+ 32.51	23 3 34.99
Sept. 10	Sun 2 Limb.....	.....	.....	.....	9.5	23.2	12 56.29	+ 0.28	.....	+ 32.88	11 13 29.45
	12 Canum Venat.	23.3	40.5	.....	.....	31.9	47 57.61	- 0.01	+ 32.84	+ 32.93	12 48 30.53
	α Ursae Minoris S. P.	9.0	22.0	.....	46.0	58.5	1 33.92	+ 18.62	.....	+ 32.93	13 2 25.47
	δ Ursae Minoris.....	12.5	56.0	40.0	24.5	9.0	23 40.40	- 7.77	.....	+ 33.09	18 24 5.72
	β Lyrae.....	5.5	21.3	37.3	53.1	9.1	43 37.26	+ 0.06	33.13	+ 33.10	18 44 10.42
	α Aquilae.....	58.4	11.7	25.3	38.6	52.1	42 25.22	+ 0.26	33.18	+ 33.13	19 42 58.61
	β Aquilae.....	27.2	40.5	54.0	7.3	20.6	46 53.92	+ 0.27	33.14	+ 33.14	19 47 27.33
	α^2 Capricorni.....	9.7	23.4	37.1	50.7	4.5	8 37.08	+ 0.38	33.15	+ 33.15	20 9 10.61
	Uranus.....	25.6	39.0	52.4	5.7	19.2	2 52.38	+ 0.35	.....	+ 33.23	23 3 25.96
	Sun 1 Limb.....	.....	9.9	23.4	36.7	50.1	14 23.34	+ 0.32	.....	+ 33.60	11 14 57.26
Sept. 11	Sun 2 Limb.....	4.6	18.0	31.4	44.7	58.1	16 31.36	+ 0.32	.....	+ 33.60	11 17 5.28
	δ Ursae Minoris.....	13.0	56.5	39.5	22.5	6.0	23 39.50	- 7.90	.....	+ 33.80	.....
	β Lyrae.....	4.8	20.6	36.5	52.4	8.3	43 36.52	+ 0.09	+ 33.82	+ 33.81	18 44 10.42
	ζ Aquilae.....	1.6	15.5	29.3	42.8	56.5	57 29.14	+ 0.26	33.90	+ 33.82	18 58 3.22
	δ Aquilae.....	25.0	38.4	51.6	5.1	18.4	16 51.70	+ 0.34	33.76	+ 33.83	19 17 25.87
	γ Aquilae.....	38.2	51.6	5.2	18.6	32.2	38 5.16	+ 0.28	33.80	+ 33.84	19 38 39.28
	α Aquilae.....	57.6	11.1	24.5	37.8	51.3	42 24.46	+ 0.30	33.89	+ 33.84	19 42 58.60
	Uranus.....	16.4	29.9	43.2	56.5	9.8	2 43.16	+ 0.39	.....	+ 33.94	23 3 17.49
	Sun 2 Limb.....	.....	.....	.....	20.0	33.4	20 6.66	+ 0.20	.....	+ 34.32	11 20 41.18
	α Ursae Minoris S.P.	11.5	23.0	.....	49.0	.....	1 36.23	+ 15.56	.....	+ 34.36	.....
Sept. 12	α Herculis.....	18.7	32.4	46.1	59.8	13.6	6 46.12	+ 0.14	+ 34.39	+ 34.47	17 7 20.73
	ζ Pegasi.....	27.7	41.4	54.8	8.2	21.6	32 54.74	+ 0.17	34.55	+ 34.57	22 33 29.48
	α Pegasi.....	46.1	59.7	13.3	27.1	40.6	56 13.36	+ 0.15	34.67	+ 34.58	22 56 48.09
	Mercury 2 Limb.....	23.9	37.6	51.2	4.6	18.2	21 51.10	+ 0.21	.....	+ 34.72	10 22 26.06
	Sun 1 Limb.....	7.0	20.3	33.6	47.0	0.4	21 33.66	+ 0.28	.....	+ 34.74	11 22 8.68
Sept. 13	Sun 2 Limb.....	14.7	28.1	41.5	55.0	8.3	23 41.52	+ 0.28	.....	+ 34.74	11 24 16.54
	α Ursae Minoris S. P.	8.5	22.0	.....	47.5	59.5	1 34.45	+ 17.12	.....	+ 34.76	.....
	η Bootis.....	59.6	13.6	27.5	41.5	55.4	46 27.52	+ 0.18	+ 34.81	+ 34.77	13 47 2.47

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpol- ated.			
Sept. 13	α Bootis.....	17.4	31.5	45.6	59.7	13.7	<i>m.</i> 7	45.58	+ 0.18	+34.81	+31.78	<i>h.</i> 14	<i>m.</i> 8	<i>s.</i> 20.54
	ε Bootis.....	53.8	8.8	23.7	38.9	53.8	37	23.80	+ 0.12	34.80	+34.78	14	37	58.70
	(a) Moon 1 Limb.....	16.2	31.0	46.1	1.0	15.9	17	46.04	+ 0.43	.....	+34.79	15	18	21.26
	α Coronæ borealis.....	49.1	4.1	19.0	33.8	48.9	27	18.98	+ 0.12	34.80	+34.79	15	27	53.89
	ζ Pegasi.....	27.5	40.8	54.4	8.0	21.4	32	54.42	+ 0.24	34.80	+34.90	22	33	29.56
	α Pegasi.....	45.6	59.4	13.1	26.7	40.4	56	13.04	+ 0.22	34.93	+34.90	22	56	48.16
	Uranus.....	57.5	11.0	24.4	37.7	51.1	2	24.34	+ 0.34	.....	+34.90	23	2	59.58
Sept. 16	δ Aquilæ.....	22.7	36.0	49.4	2.5	15.9	16	49.30	+ 0.26	+36.17	+36.02	19	17	25.58
	γ Aquilæ.....	35.8	49.3	2.8	16.2	29.6	38	2.74	+ 0.21	36.23	+36.02	19	38	38.97
	α Aquilæ.....	55.6	9.0	22.4	35.9	49.3	42	22.44	+ 0.22	35.93	+36.02	19	42	58.68
	β Aquilæ.....	24.4	37.6	51.2	4.4	17.7	46	51.06	+ 0.23	35.97	+36.02	19	47	27.31
	α Cygni.....	46.0	4.7	23.5	42.2	0.7	35	23.42	- 0.08	35.81	+36.03	20	35	59.37
INSTRUMENT REVERSED.														
Sept. 17	α Bootis.....	15.7	29.8	44.0	58.1	12.2	7	43.96	+ 0.39	+36.18	+36.08	14	8	20.43
	α Ophiuchi.....	26.0	39.6	53.3	6.9	20.6	26	53.28	+ 0.44	36.25	+36.11	17	27	29.83
	δ Ursæ Minoris.....	3.5	46.5	30.5	14.0	57.5	23	30.40	- 3.47	.....	+36.13	.....	.....	.....
	ζ Aquilæ.....	59.4	13.0	26.8	40.5	54.2	57	26.78	+ 0.43	36.00	+36.14	18	58	3.35
	δ Aquilæ.....	22.6	35.8	49.2	2.1	15.7	16	49.14	+ 0.49	36.08	+36.14	19	17	25.77
	γ Aquilæ.....	35.6	49.2	2.7	16.1	29.6	38	2.64	+ 0.45	36.07	+36.15	19	38	39.24
	Uranus.....	21.0	34.2	47.6	1.1	14.5	1	47.68	+ 0.55	.....	+36.20	23	2	24.43
Sept. 18	Venus 1 Limb.....	53.9	7.7	21.4	35.2	48.9	0	21.42	+ 0.56	.....	+36.63	13	0	58.61
	α Ursæ Minoris S. P. ....	.....	.....	.....	57.0	10.0	1	44.40	+ 7.77	.....	+36.63	13	2	28.80
	α Coronæ borealis.....	47.0	1.8	16.8	31.7	46.8	27	16.82	+ 0.33	+36.67	+36.68	15	27	53.83
	α Serpentis.....	18.3	31.8	45.2	58.6	12.1	35	45.20	+ 0.43	36.64	+36.68	15	36	22.31
	δ Ursæ Minoris.....	.....	45.5	.....	.....	56.5	23	29.25	- 3.00	.....	+36.73	18	21	2.98
	β Lyrae.....	1.3	17.2	33.2	49.1	5.1	43	33.18	+ 0.29	36.82	+36.74	18	44	10.21
	δ Aquilæ.....	21.9	35.2	48.6	1.8	15.2	16	48.54	+ 0.45	36.71	+36.75	19	17	25.74
Sept. 19	α Aquilæ.....	54.5	7.8	21.4	34.8	48.3	42	21.36	+ 0.42	36.78	+36.75	19	42	58.53
	Uranus.....	11.9	25.2	38.7	52.2	5.6	1	38.72	+ 0.51	.....	+36.81	23	2	16.04
	Sun 1 Limb.....	.....	.....	.....	17.2	30.5	43	3.87	+ 0.50	.....	+36.90	11	43	41.27
	Sun 2 Limb.....	45.2	58.4	11.5	25.1	38.5	45	11.74	+ 0.50	.....	+36.90	11	45	49.14
	ζ Aquilæ.....	58.5	12.2	25.8	39.5	53.2	57	25.84	+ 0.43	+36.90	+36.98	18	58	3.25
	δ Aquilæ.....	21.6	34.8	48.2	1.5	14.8	16	48.18	+ 0.49	37.01	+36.99	19	17	25.66
	γ Aquilæ.....	34.6	48.3	1.6	15.2	28.6	38	1.66	+ 0.45	37.02	+36.99	19	38	39.10
Sept. 20	α Aquilæ.....	54.2	7.6	21.1	34.5	47.9	42	21.06	+ 0.46	37.03	+36.99	19	42	58.51
	β Aquilæ.....	23.1	36.4	49.7	3.1	16.5	46	49.76	+ 0.47	36.99	+36.99	19	47	27.22
	π Capricorni.....	3.8	18.0	32.0	45.9	0.2	17	31.98	+ 0.63	.....	+37.00	20	18	9.61
	\downarrow Capricorni.....	30.0	44.5	59.5	14.4	29.1	35	59.50	+ 0.69	.....	+37.00	20	36	37.19
	δ Aquilæ.....	21.3	34.5	47.8	1.1	14.5	16	47.84	+ 0.49	+37.31	+37.32	19	17	25.65
	γ Aquilæ.....	34.4	47.8	1.4	14.9	28.4	38	1.38	+ 0.45	37.29	+37.33	19	38	39.16
	α Aquilæ.....	54.0	7.3	20.7	34.1	47.6	42	20.74	+ 0.46	37.33	+37.33	19	42	58.53
Sept. 21	β Aquilæ.....	22.6	36.1	49.5	2.8	16.1	46	49.42	+ 0.47	37.31	+37.33	19	47	27.22
	ζ Cygni.....	59.8	15.0	30.3	45.8	1.1	5	30.40	+ 0.33	37.36	+37.35	21	6	8.08
	Moon 1 Limb.....	53.9	8.0	22.0	36.2	50.4	51	22.10	+ 0.63	.....	+37.36	21	52	0.09
	θ Aquarii.....	.....	.....	45.8	59.3	12.6	7	45.80	+ 0.56	.....	+37.37	22	8	23.73
	σ Aquarii.....	6.1	19.6	33.2	46.6	0.2	21	33.14	+ 0.58	.....	+37.37	22	22	11.09
	Mercury 2 Limb.....	21.6	35.2	48.7	2.2	15.6	48	48.66	+ 0.49	.....	+37.67	10	49	26.82
	Sun 1 Limb.....	.....	.....	.....	.....	40.2	50	13.57	+ 0.54	.....	+37.68	11	50	51.79
Sept. 21	Sun 2 Limb.....	55.0	.....	.....	.....	48.5	52	21.75	+ 0.54	.....	+37.68	11	52	59.97
	Venus 1 Limb.....	.....	.....	.....	51.6	5.6	57	38.00	+ 0.65	.....	+37.69	12	58	16.34
(a) Faint.														

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpo- lated.			
Sept. 21	α Bootis	^{s.} 14.0	^{s.} 28.2	^{s.} 42.4	^{s.} 56.5	^{s.} 10.6	^{m.} 7	^{s.} 42.34	^{s.} + 0.43	^{s.} +37.73	^{s.} +37.71	^{h.} 14	^{m.} 8	^{s.} 20.48
	α Coronæ borealis.....	45.8	0.6	15.6	30.6	45.6	27	15.64	+ 0.38	37.76	+37.73	15	27	53.75
	δ Ursæ Minoris	0.0	44.0	27.5	10.5	54.0	23	27.20	- 6.95	.....	+37.77	.....	.....	.....
	β Lyrae.....	0.4	16.2	32.1	48.0	3.8	43	32.10	+ 0.33	37.79	+37.78	18	44	10.21
	α Aquilæ	53.4	6.6	20.2	33.6	47.1	42	20.18	+ 0.50	37.84	+37.79	19	42	58.47
	β Aquilæ	22.3	35.6	49.0	2.4	15.7	46	49.00	+ 0.51	37.68	+37.80	19	47	27.31
	ϕ Aquilæ	12.3	.....	.....	.....	5.6	20	38.95	+ 0.57	.....	+37.80	20	21	17.32
	.....	.....	25.1	38.3	51.6	.....	.....	38.33	+ 0.57	.....	.....	.....	.....	†
	70 Aquilæ .....	.....	32.2	45.4	58.8	.....	27	45.47	+ 0.57	.....	+37.81	20	28	23.85
	.....	18.3	.....	.....	.....	11.5	.....	44.90	+ 0.57	.....	.....	.....	.....	†
	1 Aquarii.....	8.1	.....	.....	.....	1.2	30	34.65	+ 0.55	.....	+37.81	20	31	13.01
	.....	.....	21.0	34.1	47.3	.....	.....	34.13	+ 0.55	.....	.....	.....	.....	†
	3 Aquarii.....	12.0	.....	.....	.....	5.5	38	38.75	+ 0.59	.....	.....	.....	.....	†
	.....	.....	26.1	39.4	52.7	.....	.....	39.40	+ 0.59	.....	+37.81	20	39	17.80
	θ Aquarii	18.6	32.0	45.4	58.8	12.2	7	45.40	+ 0.60	.....	+37.83	22	8	23.83
	σ Aquarii	5.6	19.1	32.8	46.3	59.9	21	32.74	+ 0.62	.....	+37.84	22	22	11.20
	Moon 1 Limb	48.2	2.0	15.8	29.8	43.7	45	15.90	+ 0.63	.....	+37.84	22	45	54.37
	Uranus	44.6	58.1	11.4	24.7	38.2	1	11.40	+ 0.59	.....	+37.85	23	1	49.84
	ϕ Aquarii.....	57.5	10.8	24.3	37.7	51.1	5	24.28	+ 0.59	.....	+37.85	23	6	2.72
	α^1 Piscium	39.6	52.8	6.0	19.3	32.6	18	6.06	+ 0.55	.....	+37.85	23	18	44.46
Sept. 22	α Pegasi	42.5	56.1	9.5	23.5	37.2	56	9.76	+ 0.45	+37.99	+38.02	22	56	48.23
	Uranus	35.8	49.3	2.6	16.1	29.5	1	2.66	+ 0.57	.....	+38.02	23	1	41.25
	ϕ Aquarii.....	57.4	10.6	24.1	37.4	50.8	5	24.06	+ 0.57	.....	+38.02	23	6	2.65
	α^1 Piscium	39.4	52.6	5.8	19.2	32.5	18	5.90	+ 0.53	.....	+38.03	23	18	44.46
	α Piscium.....	38.8	52.1	5.5	18.8	32.1	31	5.46	+ 0.50	38.02	+38.03	23	31	43.99
	Moon 1 Limb	14.8	28.6	42.2	56.0	9.5	38	42.22	+ 0.56	.....	+38.03	23	39	20.81
	ω Piscium	1.4	14.8	28.2	41.4	54.7	50	28.10	+ 0.49	.....	+38.03	23	51	6.62
	α Andromedæ	59.4	14.6	29.9	45.0	0.2	59	29.82	+ 0.36	38.05	+38.03	0	0	8.21
	γ Pegasi	54.5	8.5	22.3	36.1	49.7	4	22.22	+ 0.45	38.05	+38.03	0	5	0.70
	δ Piscium.....	17.4	30.8	44.2	57.5	11.1	11	44.20	+ 0.49	.....	+38.04	0	12	22.73
	Mercury 2 Limb.....	4.3	17.6	31.1	44.5	58.1	59	31.12	+ 0.46	.....	+38.16	11	0	9.74
Sept. 23	Sun 1 Limb.....	57.6	11.0	24.3	37.7	51.0	57	24.32	+ 0.50	.....	+38.17	11	58	2.99
	Sun 2 Limb.....	5.7	19.0	32.3	45.5	59.0	59	32.30	+ 0.50	.....	+38.17	12	0	10.97
	Venus 1 Limb.....	41.9	55.7	9.4	23.1	36.8	55	9.38	+ 0.59	.....	+38.18	12	55	48.15
	α Ursæ Minoris S. P.	20.0	31.0	42.0	54.5	7.5	1	43.00	+ 8.17	.....	+38.18	13	2	29.35
	α Bootis	13.7	27.6	41.8	55.9	10.0	7	41.80	+ 0.39	+38.29	+38.19	14	8	20.38
	α Coronæ borealis.....	45.5	0.2	15.2	30.0	45.1	27	15.20	+ 0.35	38.19	+38.21	15	27	53.76
	δ Ursæ Minoris.....	59.0	42.5	26.0	9.5	53.0	23	26.00	- 3.14	.....	+38.24	18	24	1.10
	β Lyrae.....	59.8	15.7	31.5	47.4	3.3	43	31.54	+ 0.31	38.32	+38.24	18	44	10.09
	α Aquilæ.....	52.9	6.3	19.7	33.1	46.6	42	19.72	+ 0.45	38.32	+38.25	19	42	58.42
	β Aquilæ	21.7	35.1	48.4	1.8	15.1	46	48.42	+ 0.47	38.27	+38.25	19	47	27.14
	Uranus.....	27.3	40.5	54.1	7.4	20.8	0	54.02	+ 0.54	.....	+38.29	23	1	32.85
	ω Piscium	1.1	14.5	27.8	41.0	54.4	50	27.76	+ 0.47	.....	+38.30	23	51	6.53
	Moon 2 Limb.....	41.1	54.7	8.5	22.3	36.0	35	8.52	+ 0.48	.....	+38.30	0	35	47.30
	ϵ Piscium	33.6	47.1	0.4	13.9	27.2	54	0.44	+ 0.46	.....	+38.31	0	54	39.21
	α Ursæ Minoris	35.0	.....	0.5	12.0	24.0	1	59.62	- 7.39	.....	+38.31	1	2	30.54
	η Piscium.....	50.1	3.7	17.5	31.3	45.2	22	17.56	+ 0.42	.....	+38.31	1	22	56.29
	Juno.....	45.4	59.2	12.3	25.5	38.7	35	12.22	+ 0.50	.....	+38.31	1	35	51.03
Sept. 24	Sun 1 Limb.....	33.0	46.3	59.6	13.0	26.2	0	59.62	+ 0.54	.....	+38.29	12	1	38.45
	Sun 2 Limb.....	41.1	54.5	7.7	21.1	34.3	3	7.71	+ 0.54	.....	+38.29	12	3	46.57
	α Ursæ Minoris S. P.	17.0	.....	.....	.....	.....	1	42.90	+ 8.95	.....	+38.30	.....	.....	.....
	α Aquarii	28.8	42.2	55.5	8.6	22.0	56	55.42	+ 0.55	+38.37	+38.49	21	57	34.46
	α Andromedæ.....	59.2	14.2	29.2	41.1	59.2	59	29.18	+ 0.37	38.70	+38.55	0	0	8.10
	γ Pegasi	54.3	8.0	21.7	35.5	49.2	4	21.74	+ 0.46	38.53	+38.55	0	5	0.75
	Mercury 2 Limb.....	42.4	55.8	9.4	22.7	36.3	11	9.32	+ 0.50	.....	+39.01	11	11	48.83

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	inter- polated.	
Sept. 25	Sun 1 Limb.....	18.1	21.6	34.8	48.0	1.5	4	34.80	+ 0.54	.....	+ 39.05	12 5 14.39
	Sun 2 Limb.....	16.3	29.6	43.0	56.4	9.6	6	42.98	+ 0.54	.....	+ 39.05	12 7 22.57
	Venus 1 Limb.....	43.3	57.1	10.8	24.5	38.4	52	10.82	+ 0.64	.....	+ 39.07	12 52 50.53
	α Ursæ Minoris S. P.	16.0	29.0	43.0	56.0	8.5	1	42.50	+ 8.95	.....	+ 39.08	13 2 30.53
	α Bootis.....	12.6	26.7	40.8	54.8	9.1	7	40.80	+ 0.42	+ 39.25	+ 39.12	14 8 20.34
	α Coronæ borealis.....	44.4	59.4	14.1	29.1	44.1	27	14.22	+ 0.37	39.13	+ 39.16	15 27 53.75
	α Serpentis.....	15.6	29.1	42.6	55.8	9.3	35	42.48	+ 0.50	39.21	+ 39.17	15 36 22.15
	δ Ursæ Minoris.....	56.0	40.0	23.5	7.5	51.5	23	23.70	- 3.43	.....	+ 39.26	18 23 59.53
	β Lyræ.....	58.7	14.6	30.5	46.4	2.2	43	30.48	+ 0.33	39.32	+ 39.27	18 44 10.08
	ζ Aquilæ.....	56.2	9.7	23.6	37.2	50.9	57	23.52	+ 0.46	39.09	+ 39.28	18 58 3.26
	Uranus.....	9.7	23.0	36.4	49.8	3.1	0	36.40	+ 0.58	.....	+ 39.40	23 1 16.38
	Mercury 2 Limb.....	.....	.....	13.4	27.2	40.6	17	13.64	+ 0.52	.....	+ 39.69	11 17 53.85
Sept. 26	Sun 1 Limb.....	43.8	.....	.....	.....	.....	8	10.43	+ 0.57	.....	+ 39.71	12 8 50.71
	Sun 2 Limb.....	51.7	5.0	18.3	31.7	45.0	10	18.34	+ 0.57	.....	+ 39.71	12 10 58.62
	α Ursæ Minoris S. P.	16.5	30.0	41.0	54.5	7.0	1	41.80	+ 9.34	.....	+ 39.73	13 2 30.87
	α Bootis.....	12.1	26.1	40.2	54.4	8.6	7	40.28	+ 0.44	+ 39.74	+ 39.75	14 8 20.47
	α Coronæ borealis.....	43.6	58.6	13.6	28.4	43.4	27	13.52	+ 0.39	39.79	+ 39.77	15 27 53.68
	δ Ursæ Minoris.....	56.5	.....	23.5	7.0	50.5	23	23.40	- 3.58	.....	+ 39.82	18 23 59.64
	β Lyræ.....	58.2	14.1	29.9	45.8	1.7	43	29.94	+ 0.35	39.82	+ 39.83	18 44 10.12
	α Aquilæ.....	51.2	4.6	18.0	31.5	45.0	42	18.06	+ 0.51	39.88	+ 39.84	19 42 58.41
	β Aquilæ.....	20.1	33.4	46.8	0.1	13.4	46	46.76	+ 0.52	39.84	+ 39.85	19 47 27.13
	Uranus.....	.....	14.2	27.6	40.8	54.1	0	27.48	+ 0.60	.....	+ 39.89	23 1 7.97
Sept. 28	α Lyræ.....	16.8	33.9	50.8	7.7	24.8	30	50.80	+ 0.29	+ 39.80	+ 39.85	18 31 30.94
	β Lyræ.....	57.9	13.8	29.8	45.7	1.6	43	29.76	+ 0.33	39.97	+ 39.85	18 44 9.94
	ζ Cygni.....	57.2	12.5	27.9	43.1	58.5	5	27.84	+ 0.35	39.80	+ 39.87	21 6 8.06
	β Aquarii.....	1.3	14.6	28.0	41.3	54.6	22	27.96	+ 0.55	39.78	+ 39.87	21 23 8.38
	ϵ Pegasi.....	12.6	26.1	39.5	53.1	6.5	35	39.56	+ 0.47	39.93	+ 39.87	21 36 19.90
	α Ursæ Minoris.....	33.0	45.0	58.0	12.0	24.5	1	58.50	- 7.37	.....	+ 39.89	.....
	Juno.....	47.0	0.2	13.4	26.7	39.8	33	13.42	+ 0.52	.....	+ 39.90	1 33 53.84
Sept. 29	α Aurigæ.....	59.5	14.8	29.8	45.1	0.5	4	29.94	+ 0.34	.....	+ 40.22	6 5 10.50
	μ Geminorum.....	6.7	21.1	35.6	49.9	4.6	12	35.58	+ 0.38	+ 40.32	+ 40.22	6 13 16.18
	δ Ursæ Minoris S. P.	45.5	29.0	14.0	57.0	40.5	23	13.20	+ 3.58	.....	+ 40.22	6 23 57.00
	ϵ Geminorum.....	54.5	9.2	23.8	38.5	53.3	33	23.86	+ 0.37	.....	+ 40.21	6 34 4.44
	α Canis Majoris.....	56.8	10.7	24.4	38.3	52.1	37	24.46	+ 0.60	40.28	+ 40.21	6 38 5.27
	Moon 2 Limb.....	49.8	5.5	20.9	36.4	51.8	50	20.88	+ 0.37	.....	+ 40.21	6 51 1.46
	δ Geminorum.....	23.6	38.0	52.4	6.7	21.0	9	52.34	+ 0.39	40.19	+ 40.21	7 10 32.94
	ϵ Geminorum.....	35.4	50.5	5.5	20.6	35.6	15	5.52	+ 0.36	.....	+ 40.21	7 15 46.09
	α Geminorum preced.	9.7	.....	41.1	.....	12.5	23	41.10	+ 0.33	40.19	+ 40.21	7 24 21.64
	α Geminorum follow.	.....	25.7	.....	57.2	.....	23	41.45	+ 0.33		+ 40.21	7 24 21.99
	α Canis Minoris.....	47.1	0.4	13.8	27.2	40.5	30	13.80	+ 0.47	40.16	+ 40.21	7 30 54.48
	β Geminorum.....	19.4	34.5	49.5	4.6	19.6	34	49.52	+ 0.36	40.13	+ 40.21	7 35 30.09
	Mercury 2 Limb.....	6.2	19.6	32.9	.....	.....	42	32.94	+ 0.48	.....	+ 40.18	11 43 13.60
Sept. 30	Sun 1 Limb.....	9.5	22.8	36.1	49.2	2.7	22	36.06	+ 0.51	.....	+ 40.18	12 23 16.75
	α Ursæ Minoris S. P.	18.0	.....	.....	.....	.....	1	44.30	+ 7.43	.....	+ 40.18	13 2 31.91
	α Lyræ.....	16.5	33.4	50.5	7.6	24.7	30	50.54	+ 0.29	+ 40.01	+ 40.03	18 31 30.86
	β Lyræ.....	57.7	13.7	29.6	45.5	1.3	43	29.56	+ 0.33	40.12	+ 40.03	18 44 9.92
	ζ Aquilæ.....	55.3	9.0	22.7	36.5	50.2	57	22.74	+ 0.43	39.81	+ 40.03	18 58 3.20
	α Cygni.....	41.4	59.8	18.5	37.2	56.0	35	18.58	+ 0.25	40.03	+ 40.01	20 35 58.81
	ζ Cygni.....	57.0	12.2	27.5	42.7	58.0	5	27.48	+ 0.34	40.14	+ 40.01	21 6 7.83
	Uranus.....	27.9	41.3	54.7	8.1	21.5	59	54.70	+ 0.54	.....	+ 40.00	23 0 35.24
Oct. 1	Mercury 2 Limb.....	2.3	15.5	28.8	42.3	.....	55	28.90	+ 0.60	.....	+ 40.85	11 56 10.35
Oct. 2	Sun 1 Limb.....	22.8	36.2	49.6	3.0	16.2	29	49.56	+ 0.64	.....	+ 40.87	12 30 31.07

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.	Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.	
		I.	II.	III.	IV.	V.			observed.	interpo- lated.		
Oct. 2	Sun 2 Limb.....	31.6	44.8	58.3	11.5	25.1	31	58.26	+ 0.64	.....	+40.87	h. m. s. 12 32 39.77
	α Ursæ Minoris S. P.	29.0	42.5	53.0	.....	1	41.50	+10.16	.....	+40.88	13 2 32.54	
	α Bootis	10.6	24.7	38.8	53.0	7.2	7	38.86	+ 0.49	+41.08	+40.90	14 8 20.25
	α Coronæ borealis.....	42.3	57.3	12.2	27.1	42.0	27	12.18	+ 0.44	41.00	+40.94	15 27 53.56
	α Serpentis.....	13.7	27.0	40.5	53.8	7.3	35	40.46	+ 0.58	41.07	+40.94	15 36 21.98
	α Cygni.....	40.2	58.9	17.6	36.5	55.2	35	17.68	+ 0.30	40.83	+41.06	20 35 59.04
	ζ Cygni.....	56.1	11.4	26.5	41.8	57.2	5	26.60	+ 0.43	40.90	+41.07	21 6 8.10
	Uranus.....	11.1	24.5	37.9	51.2	4.6	59	37.86	+ 0.67	.....	+41.11	23 0 19.64
	α Ursæ Minoris.....	34.0	47.0	1.5	13.5	27.0	2	0.60	- 9.14	.....	+41.16	1 2 32.62
	Juno.....	49.0	2.4	15.6	28.9	42.1	31	15.60	+ 0.63	.....	+41.18	1 31 57.41
Oct. 3	Sun 1 Limb.....	0.0	13.4	26.8	39.9	53.4	33	26.70	+ 0.68	.....	+41.45	12 34 8.53
	Sun 2 Limb.....	8.5	22.0	35.4	48.7	2.2	35	35.36	+ 0.68	.....	+41.45	12 36 17.49
	α Ursæ Minoris S. P.	13.5	27.5	39.0	52.0	5.0	1	39.40	+10.93	.....	+41.46	.....
Oct. 4	α Herculis.....	10.0	23.8	37.4	51.1	4.8	6	37.42	+ 0.56	+42.29	+42.24	17 7 20.22
	α Ophiuchi.....	19.6	33.3	46.8	0.5	14.2	26	46.88	+ 0.57	42.23	+42.25	17 27 29.70
	β Aquarii	58.5	11.9	25.2	38.5	52.0	22	25.22	+ 0.70	42.30	+42.35	21 23 8.27
	ϵ Pegasi.....	10.1	23.4	37.0	50.4	4.0	35	36.98	+ 0.60	42.32	+42.35	21 36 19.93
	α Aquarii	24.6	37.8	51.2	4.6	17.8	56	51.20	+ 0.67	42.40	+42.36	21 57 34.23
	Uranus.....	54.5	7.8	21.3	34.6	47.9	59	21.22	+ 0.71	.....	+42.39	23 0 4.32
	α Ursæ Minoris.....	35.0	46.5	0.5	11.5	24.0	1	59.50	- 9.84	.....	+42.44	.....
	Juno.....	43.0	56.2	9.5	22.8	36.0	30	9.50	+ 0.67	.....	+42.45	1 30 52.62
	Mercury 2 Limb.....	26.4	39.7	53.3	6.5	19.9	14	53.16	+ 0.77	.....	+42.70	12 15 36.63
	Venus 2 Limb.....	12.3	25.8	39.6	53.3	6.9	32	39.58	+ 0.87	.....	+42.71	12 33 23.16
Oct. 5	Sun 1 Limb.....	15.3	28.6	41.9	55.5	8.5	40	41.96	+ 0.81	.....	+42.71	12 41 25.48
	Sun 2 Limb.....	24.2	37.5	50.8	4.2	17.7	42	50.88	+ 0.81	.....	+42.71	12 43 34.40
	α Ursæ Minoris S. P.	10.5	23.5	37.0	51.0	3.5	1	37.10	+13.28	.....	+42.72	13 2 33.10
	α Bootis	8.8	22.8	37.1	51.2	5.3	7	37.04	+ 0.62	+42.76	+42.75	14 8 20.41
	α Coronæ borealis.....	40.4	55.4	10.3	25.3	40.2	27	10.32	+ 0.55	42.71	+42.79	15 27 53.66
	α Serpentis.....	11.8	25.2	38.5	51.8	5.3	35	38.52	+ 0.72	42.84	+42.79	15 36 22.03
	δ Ursæ Minoris.....	51.0	34.0	18.0	1.0	44.5	23	17.70	- 5.05	.....	+42.87	18 23 55.52
	β Lyrae.....	54.8	10.6	26.4	42.3	58.3	43	26.48	+ 0.49	42.93	+42.88	18 44 9.85
	ζ Cygni.....	53.8	9.3	24.6	39.7	54.8	5	24.44	+ 0.53	42.91	+42.94	21 6 7.91
	A. S. C. 2602.....	38.8	.....	.....	.....	32.1	45	5.45	+ 0.81	.....	+42.96	21 45 49.22
	.....	.....	51.5	4.7	18.2	.....	.....	4.80	+ 0.81	.....	.....	.....
	A. S. C. 2607.....	39.1	.....	.....	.....	32.6	49	5.85	+ 0.82	.....	.....	.....
	.....	.....	53.2	6.1	19.8	.....	.....	6.47	+ 0.82	.....	+42.97	21 49 50.26
	Uranus.....	46.1	59.5	12.8	26.2	39.6	59	12.84	+ 0.83	.....	+43.00	22 59 56.67
	α Ursæ Minoris.....	36.0	49.0	3.5	14.0	27.5	2	2.00	-11.96	.....	+43.06	1 2 33.10
	Juno.....	8.3	21.6	34.8	48.1	1.5	29	34.86	+ 0.79	.....	+43.07	1 30 18.72
Oct. 7	Sun 1 Limb.....	31.7	45.1	58.5	11.8	25.2	47	58.46	+ 0.80	.....	+44.34	12 48 43.60
	Sun 2 Limb.....	40.7	.....	7.4	20.6	34.2	50	7.38	+ 0.80	.....	+44.34	12 50 52.52
	α Ursæ Minoris S. P.	9.0	.....	.....	.....	.....	1	35.70	+12.90	.....	+44.35	13 2 32.95
	δ Ursæ Minoris.....	48.0	31.5	15.5	58.0	42.0	23	15.00	- 4.89	.....	+44.51	18 23 54.62
	β Lyrae .....	.....	.....	.....	40.7	56.6	43	24.86	+ 0.49	+44.50	+44.52	18 44 9.87
	γ Aquilæ	26.6	40.1	53.6	7.1	20.5	37	53.58	+ 0.68	44.60	+44.55	19 38 38.81
	α Aquilæ	46.1	59.4	13.0	26.4	39.8	42	12.94	+ 0.70	44.64	+44.55	19 42 58.19
	β Aquilæ.....	14.9	28.4	41.7	55.2	8.4	46	41.72	+ 0.71	44.52	+44.56	19 47 26.99
	α Aquarii.....	22.3	35.6	49.0	2.2	15.5	56	48.92	+ 0.77	44.56	+44.62	21 57 34.31

Oct. 8	α Cygni.....	35.7	54.4	13.2	31.8	50.4	35	13.10	+ 0.31	+45.23	+45.24	20 35 58.68
	ζ Cygni.....	51.6	6.8	22.2	37.4	52.7	5	22.14	+ 0.51	45.19	+45.25	21 6 7.90
	ϵ Pegasi.....	7.0	20.4	31.0	47.2	0.8	35	33.88	+ 0.68	45.30	+45.27	21 36 19.83
	α Aquarii	21.6	34.8	48.1	1.5	14.6	56	48.12	+ 0.76	45.36	+45.28	21 57 34.16
	ζ Pegasi.....	16.5	29.8	43.5	57.1	10.3	32	43.44	+ 0.67	45.28	+45.30	22 33 29.41

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instrument.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpolated.	
Oct. 8	Juno.....	19.8	33.1	46.3	.....	13.0	27	46.37	+ 0.77	.....	+45.40	1 28 32.54
Oct. 9	Sun 1 Limb.....	49.8	3.1	16.5	29.8	43.3	55	16.50	+ 0.80	.....	+45.88	12 56 3.18
	Sun 2 Limb.....	59.1	12.5	26.0	39.4	52.7	57	25.94	+ 0.80	.....	+45.88	12 58 12.62
	β Lyrae.....	51.4	7.5	23.3	39.2	55.0	43	23.28	+ 0.46	+46.07	+46.08	18 44 9.82
	ζ Aquilæ.....	48.8	2.4	16.1	29.7	43.3	57	16.06	+ 0.64	46.12	+46.09	18 58 2.79
	δ Aquilæ.....	12.1	25.3	38.5	51.8	5.2	16	38.58	+ 0.73	46.06	+46.10	19 17 25.41
	ζ Cygni.....	50.6	5.9	21.2	36.5	51.7	5	21.18	+ 0.50	46.14	+46.16	21 6 7.84
	β Aquarii.....	54.4	7.8	21.3	34.6	47.8	22	21.18	+ 0.80	46.19	+46.17	21 23 8.15
	α Ursæ Minoris.....	32.5	.....	.....	.....	.....	1	59.20	-12.72	.....	+46.28	.....
Oct. 10	Venus 2 Limb.....	5.6	18.8	.....	.....	.....	22	32.43	+ 0.78	.....	+46.57	12 23 19.78
	Sun 1 Limb.....	29.6	42.8	56.2	9.6	23.1	58	56.26	+ 0.76	.....	+46.58	12 59 43.60
	α Ursæ Minoris S. P. ....	.....	21.0	.....	.....	.....	1	34.30	+11.74	.....	+46.58	13 2 32.62
	δ Ursæ Minoris.....	42.5	27.0	11.0	.....	.....	23	10.37	- 4.44	.....	+46.74	18 23 52.67
	ζ Aquilæ.....	47.9	1.7	15.5	29.1	42.7	57	15.38	+ 0.61	+46.82	+46.76	18 58 2.75
	δ Aquilæ.....	11.5	24.6	37.9	51.2	4.6	16	37.96	+ 0.69	46.71	+46.77	19 17 25.42
	ζ Cygni.....	49.8	5.4	20.5	35.7	51.1	5	20.50	+ 0.50	46.81	+46.82	21 6 7.82
	β Aquarii.....	53.8	7.2	20.6	34.0	47.2	22	20.56	+ 0.75	46.85	+46.83	21 23 8.14
	ϵ Pegasi.....	5.4	18.9	32.5	45.8	59.4	35	32.40	+ 0.65	46.79	+46.83	21 36 19.88
	Uranus.....	6.0	19.4	32.8	46.2	59.7	58	32.82	+ 0.76	.....	+46.88	22 59 20.46
	Juno.....	4.5	17.8	31.1	44.3	57.6	26	31.06	+ 0.73	.....	+46.95	1 27 18.74
	Venus 2 Limb.....	15.6	28.9	42.5	55.9	9.5	20	42.48	+ 0.63	.....	+47.29	12 21 30.40
	α Ursæ Minoris S. P. ....	.....	23.0	.....	50.0	4.0	1	36.60	+ 8.63	.....	+47.31	.....
Oct. 11	Sun 1 Limb.....	9.7	22.9	36.3	49.8	3.1	2	36.36	+ 0.61	.....	+47.31	13 3 24.28
	Sun 2 Limb.....	19.0	32.4	46.0	59.4	12.7	4	45.90	+ 0.61	.....	+47.31	13 5 33.82
Oct. 12	ζ Aquilæ.....	46.4	0.2	13.8	27.5	41.1	57	13.80	+ 0.58	+48.39	+48.35	18 58 2.73
	δ Aquilæ.....	9.8	23.0	36.4	49.6	3.1	16	36.38	+ 0.65	48.29	+48.36	19 17 25.39
	γ Aquilæ.....	22.7	36.3	49.8	3.4	16.8	37	49.80	+ 0.60	48.37	+48.37	19 38 38.77
	α Aquilæ.....	42.2	55.7	9.2	22.7	36.0	42	9.16	+ 0.61	48.43	+48.38	19 42 58.15
	β Aquilæ.....	11.4	24.5	37.8	51.1	4.6	46	37.88	+ 0.63	48.36	+48.38	19 47 26.89
	Uranus.....	50.9	4.2	17.6	31.2	44.5	58	17.68	+ 0.72	.....	+48.47	22 59 6.87
	α Ursæ Minoris.....	26.0	41.5	54.5	9.0	22.0	1	54.60	-10.20	.....	+48.53	.....
	Juno.....	46.9	0.3	13.6	26.8	40.2	25	13.56	+ 0.70	.....	+48.54	1 26 2.80
Oct. 13	α Herculis.....	3.2	16.7	30.4	44.3	58.2	6	30.56	+ 0.55	+49.03	+48.98	17 7 20.09
	α Ophiuchi.....	12.7	26.3	39.8	53.5	7.3	26	39.92	+ 0.57	49.04	+48.99	17 27 29.48
	δ Ursæ Minoris.....	39.5	23.5	7.5	49.5	.....	23	6.75	- 4.00	.....	+49.01	.....
	α Lyrae.....	7.1	24.2	41.2	58.3	15.3	30	41.22	+ 0.37	48.93	+49.02	18 31 30.61
	β Lyrae.....	48.5	4.4	20.4	36.2	52.1	43	20.32	+ 0.42	48.98	+49.02	18 44 9.76
Oct. 14	INSTRUMENT REVERSED.											
Oct. 15	Sun 1 Limb.....	.....	.....	22.3	35.7	49.1	17	22.24	+ 0.54	.....	+50.46	13 18 13.24
	Sun 2 Limb.....	5.6	18.8	32.4	45.8	59.2	19	32.36	+ 0.54	.....	+50.46	13 20 23.36
	α Aquarii.....	16.6	30.0	43.2	56.7	9.8	56	43.26	+ 0.49	+50.42	+50.73	21 57 34.48
	ζ Pegasi.....	11.2	24.7	38.1	51.6	5.2	32	38.16	+ 0.41	50.76	+50.75	22 33 29.32
	α Pegasi.....	29.7	43.1	56.7	10.3	24.0	55	56.76	+ 0.38	50.99	+50.76	22 56 47.90
	Uranus.....	29.0	42.5	55.8	9.3	22.8	57	55.88	+ 0.53	.....	+50.76	22 58 47.17
	ι Piscium.....	26.0	39.4	52.6	6.0	19.5	30	52.70	+ 0.45	50.83	+50.78	23 31 43.93
	α Andromedæ.....	47.1	2.2	17.3	32.3	47.3	59	17.24	+ 0.26	50.80	+50.79	0 0 8.29
	α Ursæ Minoris.....	34.0	45.5	0.5	12.0	28.5	2	0.10	-17.96	.....	+50.82	.....
	Juno.....	49.1	2.3	15.6	29.0	42.2	23	15.64	+ 0.51	.....	+50.83	1 21 6.98
	Venus 2 Limb.....	.....	54.0	7.3	20.6	.....	13	7.30	+ 0.53	.....	+51.57	12 13 59.40†

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	inter- polated.			
Oct. 16	Venus 2 Limb.....	^{s.} 32.2	^{s.} 45.7	^{s.} 59.1	^{s.} 12.5	^{s.} 25.8	^{m.} 11	^{s.} 59.06	^{s.} + 0.55	^{s.}	^{s.} + 51.78	^{h.} 12	^{m.} 12	^{s.} 51.39
	α Ursæ Minoris S. P. ....	.....	12.0	.....	35.5	50.0	1	23.50	+ 18.07	.....	+ 51.81	13	2	33.38
Oct. 17	Sun 1 Limb.....	.....	34.6	48.0	1.6	.....	24	48.07	+ 0.56	.....	+ 51.82	13	25	40.45
	α Bootis.....	59.9	14.2	28.3	42.4	56.5	7	28.26	+ 0.36	+ 51.79	+ 51.84	14	8	20.46
	α Coronæ borealis	31.6	46.6	1.5	16.4	31.4	27	1.50	+ 0.31	51.66	+ 51.88	15	27	53.69
	δ Ursæ Minoris.....	40.0	23.0	.....	.....	.....	23	6.85	- 7.28	.....	+ 51.97	18	23	51.54
	29 Capricorni.....	32.7	46.9	0.2	14.2	28.0	6	0.40	+ 0.60	.....	+ 52.06	21	6	53.06
	β Aquarii.....	48.7	2.0	15.4	28.7	42.1	22	15.38	+ 0.54	52.15	+ 52.06	21	23	7.98
	Moon 1 Limb.....	7.9	22.8	37.4	51.7	6.2	24	37.20	+ 0.64	.....	+ 52.07	21	25	29.91
	δ Capricorni.....	52.0	5.8	19.7	33.6	47.6	37	19.74	+ 0.60	.....	+ 52.07	21	38	12.41
	ι Aquarii.....	27.5	41.1	55.0	8.6	22.3	56	54.90	+ 0.59	.....	+ 52.08	21	57	47.57
	ζ Pegasi.....	9.8	23.3	36.8	50.4	3.7	32	36.80	+ 0.44	52.08	+ 52.10	22	33	29.34
	α Pegasi.....	28.0	41.7	55.5	9.1	22.7	55	55.40	+ 0.40	52.32	+ 52.11	22	56	47.91
	Uranus.....	15.2	28.6	42.0	55.5	8.8	57	42.02	+ 0.55	.....	+ 52.11	22	58	34.68
	α Ursæ Minoris.....	28.5	44.0	58.5	13.5	26.0	1	58.10	- 16.83	.....	+ 52.18	1	2	33.45
	Juno.....	29.7	43.0	56.4	9.8	23.3	21	56.44	+ 0.53	.....	+ 52.19	1	22	49.16
	Venus 2 Limb.....	31.6	45.1	58.5	11.8	25.3	10	58.46	+ 0.54	.....	+ 52.54	12	11	51.54
Oct. 18	Sun 1 Limb.....	4.2	18.5	31.8	45.2	58.8	28	31.70	+ 0.55	.....	+ 52.58	13	29	24.83
	Sun 2 Limb.....	15.7	29.2	42.5	56.1	9.5	30	42.60	+ 0.55	.....	+ 52.58	13	31	35.73
	α Coronæ borealis	30.6	45.6	0.5	15.5	30.5	27	0.54	+ 0.30	+ 52.62	+ 52.65	15	27	53.49
	α Serpentis.....	2.0	15.3	28.8	42.3	55.6	35	28.80	+ 0.45	52.73	+ 52.65	15	36	21.90
	δ Ursæ Minoris.....	37.0	21.0	4.0	47.5	31.0	23	4.10	- 7.29	.....	+ 52.76	.....	.....	.....
	β Lyrae.....	44.8	0.7	16.7	32.6	48.5	43	16.66	+ 0.24	52.71	+ 52.77	18	44	9.67
	ζ Aquilæ.....	42.2	55.8	9.5	23.2	36.8	57	9.50	+ 0.40	52.77	+ 52.78	18	58	2.68
	δ Aquilæ.....	5.3	18.6	32.0	45.2	58.5	16	31.92	+ 0.47	52.83	+ 52.79	19	17	25.18
	δ Capricorni.....	50.7	5.0	18.5	32.7	46.4	37	18.66	+ 0.59	.....	+ 52.88	21	38	12.13
	ι Aquarii.....	26.4	40.1	53.8	7.7	21.4	56	53.88	+ 0.58	.....	+ 52.90	21	57	47.36
	Moon 1 Limb.....	14.9	28.9	42.8	56.8	10.8	17	42.84	+ 0.59	.....	+ 52.91	22	18	36.34
	58 Aquarii.....	51.8	5.5	19.0	32.5	46.3	22	19.02	+ 0.56	.....	+ 52.91	22	23	12.49
	Venus 2 Limb.....	39.6	53.0	6.4	19.8	33.2	10	6.40	+ 0.58	.....	+ 53.51	12	11	0.49
	α Ursæ Minoris S. P.	53.5	8.0	20.5	34.0	48.0	1	20.80	+ 18.84	.....	+ 53.55	13	2	33.19
Oct. 19	Sun 1 Limb.....	48.8	2.2	15.8	29.3	43.0	32	15.82	+ 0.59	.....	+ 53.57	13	33	9.98
	Sun 2 Limb.....	59.8	13.4	26.9	40.2	53.8	34	26.82	+ 0.59	.....	+ 53.57	13	35	20.98
	η Bootis.....	40.3	54.4	8.4	22.5	36.5	46	8.42	+ 0.40	+ 53.63	+ 53.58	13	47	2.40
	α Bootis.....	58.3	12.4	26.5	40.6	54.7	7	26.50	+ 0.38	53.54	+ 53.59	14	8	20.47
	α Coronæ borealis	29.5	44.5	59.6	14.4	29.5	26	59.50	+ 0.32	53.64	+ 53.65	15	27	53.47
	α Serpentis.....	1.1	14.5	27.8	41.2	54.5	35	27.82	+ 0.49	53.67	+ 53.65	15	36	21.96
	δ Ursæ Minoris.....	36.0	20.0	3.5	47.5	30.5	23	3.50	- 7.58	.....	+ 53.77	18	23	49.69
	β Lyrae.....	43.7	59.7	15.6	31.5	47.3	43	15.56	+ 0.27	53.76	+ 53.78	18	44	9.61
	λ Aquarii.....	55.0	8.4	21.7	35.1	48.6	43	21.76	+ 0.58	.....	+ 53.94	22	44	16.28
	Uranus.....	1.5	14.9	28.2	41.6	55.0	57	28.24	+ 0.58	.....	+ 53.95	22	58	22.77
	Moon 1 Limb.....	51.4	5.1	18.8	32.4	46.3	10	18.80	+ 0.59	.....	+ 53.96	23	11	13.35
	λ Piscium.....	32.4	45.7	59.2	12.4	25.6	32	59.06	+ 0.52	.....	+ 53.97	23	33	53.55
	29 Piscium.....	16.8	30.1	43.4	56.7	10.2	52	43.44	+ 0.56	.....	+ 53.98	23	53	37.98
	10 Ceti.....	4.8	.....	.....	.....	57.7	17	31.25	+ 0.54	.....	+ 54.00	0	18	25.79
	.....	.....	17.5	31.0	44.2	.....	.....	30.90	+ 0.54	.....	.....	.....	.....	.....
	12 Ceti.....	31.5	.....	.....	.....	25.0	20	58.25	+ 0.56	.....	.....	.....	.....	.....
	.....	.....	45.2	58.5	11.8	.....	.....	58.50	+ 0.56	.....	+ 54.00	0	21	53.06
	α Ursæ Minoris.....	30.0	43.5	56.0	10.5	24.0	1	56.80	- 17.54	.....	+ 54.03	1	2	33.29
	Juno.....	10.5	23.7	37.2	50.5	3.8	20	37.44	+ 0.56	.....	+ 54.04	1	21	31.74
Oct. 20	α Pegasi.....	25.3	39.0	52.6	6.2	20.0	55	52.62	+ 0.48	+ 54.99	+ 54.87	22	56	47.97
	Uranus.....	51.8	8.4	22.0	35.3	48.6	57	21.82	+ 0.61	.....	+ 54.88	22	58	17.31
	ι Piscium.....	21.6	35.2	48.5	1.7	15.1	30	48.42	+ 0.54	55.00	+ 54.89	23	31	43.85
	λ Piscium.....	31.4	44.7	58.1	11.3	24.6	32	58.02	+ 0.56	.....	+ 54.89	23	33	53.47

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpo- lated.			
Oct. 20	29 Piscium.....	<i>s.</i> 15.7	<i>s.</i> 29.1	<i>s.</i> 42.4	<i>s.</i> 55.8	<i>s.</i> 9.1	<i>m.</i> 52	<i>s.</i> 42.42	<i>s.</i> + 0.59	.....	<i>s.</i> + 54.90	<i>h.</i> 23	<i>m.</i> 53	<i>s.</i> 37.91
	α Andromedæ.....	42.8	58.0	13.0	28.1	43.1	59	13.00	+ 0.37	+ 54.92	+ 54.91	0	0	8.28
	Moon 1 Limb	5.6	19.3	33.0	46.6	0.3	3	32.96	+ 0.58	.....	+ 54.91	0	4	28.45
	β Ceti	11.2	25.0	39.0	53.0	6.8	34	39.00	+ 0.68	54.68	+ 54.93	0	35	34.61
	δ Piscium.....	1.6	15.2	28.5	41.7	55.0	39	28.40	+ 0.53	.....	+ 54.93	0	40	23.86
	α Ursæ Minoris.....	27.5	42.5	51.0	9.0	20.5	1	54.70	- 16.39	.....	+ 54.94	.....	.....	.....
	Venus 2 Limb	22.4	35.6	49.1	2.4	15.8	8	49.06	+ 0.62	.....	+ 55.22	12	9	44.90
	α Ursæ Minoris S. P.	49.0	.....	18.0	.....	47.0	1	17.87	+ 19.63	.....	+ 55.24	.....	.....	.....
Oct. 21	Sun 1 Limb.....	.....	32.2	46.0	59.6	13.1	39	45.95	+ 0.65	.....	+ 55.26	13	40	41.86
	α Bootis	56.4	10.6	24.7	38.7	52.8	7	24.64	+ 0.43	+ 55.36	+ 55.27	14	8	20.34
	α Lyrae.....	0.7	17.7	34.8	51.8	8.8	30	34.76	+ 0.24	55.33	+ 55.39	18	31	30.39
	β Lyrae.....	.....	57.9	14.0	29.8	45.6	43	13.89	+ 0.31	55.35	+ 55.39	18	44	9.59
Oct. 24	Venus 2 Limb.....	35.6	48.8	2.1	15.5	28.8	8	2.16	+ 0.58	.....	+ 58.88	12	9	1.62
	12 Canum Venat.	57.4	14.4	31.5	48.7	5.8	47	31.56	+ 0.21	+ 58.86	+ 58.91	12	48	30.68
	α Ursæ Minoris S. P.	46.5	1.5	15.5	29.0	42.0	1	14.90	+ 18.85	.....	+ 58.92	13	2	32.67
Oct. 25	Sun 1 Limb.....	27.3	41.0	54.6	8.2	22.0	54	54.62	+ 0.62	.....	+ 58.97	13	55	54.21
	Sun 2 Limb.....	39.4	53.2	6.7	20.4	34.0	57	6.74	+ 0.62	.....	+ 58.97	13	58	6.33
	δ Ursæ Minoris .....	.....	10.5	55.0	39.0	23.0	22	55.12	- 7.57	.....	+ 59.18	18	23	46.73
	ζ Pegasi	2.3	15.8	29.4	42.8	56.3	32	29.32	+ 0.48	59.44	+ 59.39	22	33	29.19
Oct. 26	α Cygni.....	20.0	38.8	57.3	16.1	34.7	34	57.38	+ 0.16	+ 60.68	+ 60.57	20	35	58.11
	ϵ Pegasi.....	51.8	5.4	18.5	32.1	45.5	35	18.66	+ 0.47	60.51	+ 60.62	21	36	19.75
	α Aquarii.....	6.4	19.6	32.8	46.1	59.4	56	32.86	+ 0.53	60.65	+ 60.64	21	57	34.03
	α Ursæ Minoris .....	.....	34.0	44.5	.....	16.0	1	46.90	- 15.32	.....	+ 60.78	.....	.....	.....
Oct. 27	α Ursæ Minoris S. P.	.....	.....	10.5	25.0	39.0	1	10.73	+ 20.07	.....	+ 62.04	13	2	32.84
Oct. 28	Sun 1 Limb.....	56.0	9.7	23.3	36.8	50.6	6	23.28	+ 0.74	.....	+ 62.08	14	7	26.10
	Sun 2 Limb.....	8.6	22.2	35.8	49.6	3.2	8	35.88	+ 0.74	.....	+ 62.08	14	9	38.70
	(a) Mercury 1 Limb.....	.....	.....	27.6	41.4	55.3	38	27.56	+ 0.76	.....	+ 2.10	14	38	30.42
	α Coronæ borealis .....	.....	.....	50.8	5.9	21.0	27	50.96	+ 0.43	+ 2.02	+ 2.13	15	27	53.52
	α Serpentis.....	52.4	5.8	19.3	32.6	46.1	36	19.24	+ 0.60	2.11	+ 2.13	15	36	21.97
	δ Ursæ Minoris	24.5	8.0	52.0	35.0	19.0	23	51.70	- 7.97	.....	+ 2.23	18	23	45.96
	ζ Pegasi	59.1	12.6	26.2	39.5	53.2	33	26.12	+ 0.58	2.51	+ 2.38	22	33	29.08
	α Ursæ Minoris S. P.	.....	.....	9.5	.....	.....	2	9.20	+ 20.83	.....	+ 2.88	13	2	32.91
	η Bootis	30.8	45.2	59.1	13.2	27.3	46	59.12	+ 0.51	+ 2.89	+ 2.91	13	47	2.54

Oct. 29	ϵ Bootis.....	25.1	40.2	55.2	10.3	25.3	37	55.22	+ 0.43	2.80	+ 2.93	14	37	58.58
	β Lyrae.....	34.4	50.2	6.0	21.8	37.8	44	6.04	+ 0.37	2.98	+ 3.08	18	44	9.49
	ζ Pegasi	58.5	11.8	25.2	38.7	52.4	33	25.32	+ 0.60	3.28	+ 3.21	22	33	29.13
	Uranus.....	1.0	14.4	27.7	41.3	54.6	57	27.80	+ 0.72	.....	+ 3.23	22	57	31.75
	α Andromedæ	31.3	49.4	4.5	19.6	34.6	0	4.48	+ 0.43	3.34	+ 3.26	0	0	8.17
	γ Pegasi	29.4	43.1	56.8	10.5	24.4	4	56.84	+ 0.56	3.39	+ 3.27	0	5	0.67
	α Ursæ Minoris	20.0	36.0	48.5	2.5	15.5	2	48.50	- 19.25	.....	+ 3.30	1	2	32.55
	Moon 2 Limb	23.5	37.8	51.8	6.3	20.6	24	52.00	+ 0.56	.....	+ 3.58	9	24	56.14
	α Ursæ Minoris S. P.	40.0	54.0	8.0	22.5	36.0	2	8.10	+ 20.46	.....	+ 3.71	13	2	32.27

Oct. 30	Sun 1 Limb.....	38.7	52.5	6.2	19.8	33.5	15	6.14	+ 0.78	.....	+ 3.75	14	15	10.67
	Sun 2 Limb.....	52.0	5.7	19.4	33.0	46.8	17	19.38	+ 0.78	.....	+ 3.75	14	17	23.91
	δ Ursæ Minoris.....	.....	6.0	49.5	.....	.....	23	49.65	- 8.12	.....	+ 3.91	18	23	45.44
	β Lyrae.....	33.4	49.2	5.0	.....	36.8	44	5.07	+ 0.38	+ 3.92	+ 3.92	.....	.....	.....
Oct. 31	δ Ursæ Minoris.....	21.0	.....	.....	.....	16.0	23	48.50	- 9.41	.....	+ 5.18	.....	.....	.....
	β Lyrae.....	32.2	48.0	3.7	19.6	35.5	44	3.80	+ 0.37	+ 5.19	+ 5.19	.....	.....	.....

(a) Clock put forward one minute.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Oct. 31	ζ Pegasi	^{s.} 56.5	^{f.} 10.2	^{s.} 23.5	^{s.} 37.0	^{s.} 50.6	^{m.} 33	^{s.} 23.56	+ 0.64	+ 4.98	+ 5.11	^{h.} 22 ^{m.} 33 ^{s.} 29.31
	α Andromedæ	32.5	47.6	2.6	17.7	32.7	0	2.62	+ 0.49	5.13	+ 5.15	0 0 8.26
	γ Pegasi	27.5	41.2	54.7	8.5	22.4	4	54.86	+ 0.59	5.32	+ 5.16	0 5 0.61
Nov. 1	β Lyrae	31.5	47.7	3.5	19.5	.....	44	3.48	+ 0.37	+ 5.49	+ 5.49	.....
Nov. 5	ζ Cygni	27.6	42.9	58.2	13.4	28.6	5	58.14	+ 0.37	+ 8.84	+ 8.90	21 6 7.41
	β Aquarii	31.4	44.7	58.1	11.6	24.8	22	58.12	+ 0.66	9.04	+ 8.90	21 23 7.68
	ε Pegasi	43.0	56.3	9.8	23.2	36.6	36	9.78	+ 0.56	9.16	+ 8.91	21 36 19.25
	Uranus	29.4	43.1	56.4	9.8	23.1	56	56.36	+ 0.67	.....	+ 8.94	22 57 5.97
	α Andromedæ	28.8	43.8	58.9	14.0	29.1	59	58.92	+ 0.39	8.90	+ 8.97	0 0 8.28
	γ Pegasi	24.2	37.8	51.4	5.2	19.0	4	51.52	+ 0.51	8.72	+ 8.97	0 5 1.00
	α Ursæ Minoris	11.5	26.5	.....	.....	.....	2	40.35	- 18.60	.....	+ 9.00	.....
Nov. 6	α Ursæ Minoris S. P.	31.0	46.0	1.5	.....	.....	2	0.40	+ 20.09	.....	+ 9.73	.....
Nov. 7	α Lyrae	46.1	3.0	19.8	37.0	54.1	31	20.00	+ 0.28	+ 9.70	+ 9.85	18 31 30.13
	ζ Cygni	26.6	41.3	56.8	12.1	27.5	5	56.86	+ 0.38	10.07	+ 9.91	21 6 7.15
Nov. 9	Sun 1 Limb .....	.....	.....	.....	.....	0.5	54	32.69	+ 0.74	.....	+ 11.01	14 54 44.44
	Sun 2 Limb	20.2	33.9	47.9	1.8	15.8	56	47.92	+ 0.74	.....	+ 11.01	14 56 59.67
	α Andromedæ	26.5	41.4	56.7	.....	.....	59	56.61	+ 0.39	+ 11.18	+ 11.18	.....
	α Ursæ Minoris	10.5	23.5	37.0	49.5	4.0	2	36.90	- 18.95	.....	+ 11.20	.....
Nov. 10	δ Ursæ Minoris	10.0	53.5	37.0	21.0	4.0	23	37.10	- 7.87	.....	+ 11.43	.....
	β Lyrae	25.7	41.6	57.5	13.3	29.2	43	57.46	+ 0.31	+ 11.42	+ 11.44	18 44 9.21
	ζ Aquilæ	23.0	36.6	50.5	4.1	17.8	57	50.40	+ 0.48	11.46	+ 11.44	18 58 2.32
	12 Canum Venat.	44.6	1.8	19.1	36.1	53.3	48	18.98	+ 0.21	+ 11.78	+ 11.60	12 48 30.79
	α Ursæ Minoris S. P.	.....	44.0	.....	13.0	28.0	1	58.80	+ 18.13	.....	+ 11.60	.....
Nov. 11	Sun 1 Limb	8.3	22.3	36.4	50.3	4.2	2	36.30	+ 0.63	.....	+ 11.62	15 2 48.55
	Sun 2 Limb	24.5	38.3	52.2	6.2	20.1	4	52.26	+ 0.63	.....	+ 11.62	15 5 4.51
INSTRUMENT REVERSED.												
	δ Ursæ Minoris	5.0	48.5	33.0	17.0	.....	23	32.62	- 4.12	.....	+ 11.66	.....
	α Lyrae	43.7	0.6	17.8	34.7	51.7	31	17.70	+ 0.40	11.82	+ 11.66	18 31 29.76
	β Lyrae	25.2	41.1	56.9	12.7	28.6	43	56.90	+ 0.45	11.82	+ 11.66	18 44 9.01
	ι Piscium	4.8	18.3	31.6	45.0	58.3	31	31.60	+ 0.64	11.57	+ 11.72	23 31 43.96
	α Andromedæ	25.6	41.1	56.2	11.4	26.4	59	56.14	+ 0.49	11.54	+ 11.72	0 0 8.35
	γ Pegasi	21.3	34.9	48.5	2.2	16.0	4	48.58	+ 0.58	11.55	+ 11.72	0 5 0.88
	α Ursæ Minoris S. P.	40.0	53.0	5.0	20.0	35.5	2	6.70	+ 9.91	.....	+ 11.87	.....

Nov. 12	Sun 1 Limb	11.7	25.8	39.6	53.6	7.6	6	39.66	+ 0.81	.....	+ 11.90	15 6 52.37
	Sun 2 Limb	27.8	41.7	55.8	9.7	23.7	8	55.74	+ 0.81	.....	+ 11.90	15 9 8.45
	α Coronæ borealis	11.0	26.0	40.8	55.8	10.8	27	40.88	+ 0.54	+ 12.02	+ 11.91	15 27 53.33
	α Serpentis	42.8	56.0	9.3	22.6	36.0	36	9.34	+ 0.66	11.99	+ 11.91	15 36 21.91
	ζ Cygni	24.2	39.6	54.8	10.2	25.6	5	54.88	+ 0.52	11.82	+ 12.00	21 6 7.40
	Uranus	9.1	22.5	35.9	49.3	2.7	56	35.90	+ 0.74	.....	+ 12.04	22 56 48.68
	12 Canum Venat.	43.8	1.0	18.2	35.4	52.5	48	18.18	+ 0.38	+ 12.45	+ 12.34	12 48 30.90
	α Ursæ Minoris S. P.	39.0	51.0	6.0	.....	.....	2	6.53	+ 9.07	.....	+ 12.35	.....
Nov. 13	α Lyrae	42.8	59.9	16.9	33.9	51.0	31	16.90	+ 0.38	12.60	+ 12.47	18 31 29.75
	ζ Cygni	23.6	38.8	54.2	9.5	24.7	5	54.16	+ 0.44	12.60	+ 12.53	21 6 7.13
	α Andromedæ	25.1	40.3	55.3	10.5	25.4	59	55.32	+ 0.45	12.38	+ 12.60	0 0 8.37
	α Arietis	29.0	43.4	57.9	12.3	26.6	57	57.81	+ 0.49	12.57	+ 12.64	1 58 10.97

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock observed. interpo- lated.		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.						
Nov. 13	α Ceti.....	16.5	29.8	43.2	56.5	9.7	53	43.14	+ 0.59	+12.65	+12.66	2 53 56.39
Nov. 15	Sun 1 Limb.....	25.8	39.7	53.8	7.9	21.8	18	53.80	+ 0.79	.....	+13.75	15 19 8.34
	α Ursæ Minoris S. P.	34.5	47.0	4.0	17.0	.....	2	2.92	+11.01	.....	+14.23	13 2 28.16
	α Bootis	37.7	51.8	5.8	20.0	34.2	8	5.90	+ 0.56	+14.23	+14.25	14 8 20.71
Nov. 16	δ Ursæ Minoris.....	.....	.....	28.5	12.0	55.0	23	28.27	- 4.10	.....	+14.33	18 23 38.50
	β Lyrae.....	22.6	38.4	54.4	10.2	26.1	43	54.34	+ 0.47	14.29	+14.34	18 44 9.15
	ζ Aquilæ.....	19.9	33.6	47.5	0.9	14.6	57	47.30	+ 0.60	14.37	+14.34	18 58 2.24
	δ Aquilæ	43.2	56.6	9.8	23.2	36.5	17	9.86	+ 0.67	14.32	+14.35	19 17 24.88
	γ Aquilæ	56.3	9.8	23.3	36.7	50.3	38	23.28	+ 0.63	14.35	+14.35	19 38 38.26
	α Aquilæ	15.8	29.2	42.6	56.1	9.5	42	42.64	+ 0.64	14.41	+14.35	19 42 57.63
	Uranus.....	0.5	14.0	27.4	40.8	54.5	56	27.44	+ 0.74	.....	+14.41	22 56 42.59
	ϕ Aquarii.....	20.6	33.9	47.4	0.7	14.2	5	47.36	+ 0.73	.....	+14.41	23 6 2.50
	Moon 1 Limb	1.2	14.8	28.3	42.0	55.7	37	28.40	+ 0.72	.....	+14.42	23 37 43.54
	ω Piscium.....	24.7	38.0	51.3	4.7	18.2	50	51.38	+ 0.65	.....	+14.43	23 51 6.46
	41 Piscium.....	40.8	54.4	7.8	21.3	31.6	12	7.78	+ 0.64	.....	+14.43	0 12 22.85
	α Ursæ Minoris .....	.....	11.0	22.0	.....	51.0	2	23.07	- 9.81	.....	+14.45	1 2 27.71
	Juno.....	.....	54.4	7.8	21.2	34.7	9	7.81	+ 0.75	.....	+14.45	1 9 23.01
Nov. 17	ω Piscium.....	24.5	37.7	51.1	4.4	17.6	50	51.06	+ 0.72	.....	+14.76	23 51 6.54
	α Andromedæ	22.6	37.7	52.8	7.8	22.7	59	52.72	+ 0.55	+14.85	+14.77	0 0 8.04
	γ Pegasi	17.8	31.5	45.2	58.9	12.6	4	45.20	+ 0.66	14.81	+14.77	0 5 0.63
	41 Piscium.....	40.4	53.7	7.2	20.5	33.9	12	7.14	+ 0.71	.....	+14.77	0 12 22.62
	Moon 1 Limb.....	33.2	46.8	0.5	14.1	27.7	30	0.46	+ 0.74	.....	+14.78	0 30 15.98
	β Ceti.....	50.7	4.8	18.8	32.7	46.5	35	18.70	+ 0.91	14.65	+14.78	0 35 34.39
	ϵ Piscium.....	57.1	10.4	23.8	37.2	50.6	54	23.82	+ 0.71	.....	+14.79	0 54 39.32
	α Ursæ Minoris	55.0	.....	24.5	36.5	51.5	2	23.20	-11.60	.....	+14.79	.....
	Juno	34.8	48.4	1.8	15.1	28.7	9	1.76	+ 0.82	.....	+14.80	1 9 17.38
	θ^1 Ceti	20.1	33.6	47.0	0.4	13.8	15	46.98	+ 0.83	14.81	+14.80	1 16 2.61
Nov. 18	α Andromedæ	21.8	37.0	52.0	6.8	22.0	59	51.92	+ 0.54	+15.64	+15.64	0 0 8.10
	γ Pegasi	16.9	30.6	44.5	58.1	11.8	4	44.38	+ 0.64	15.61	+15.64	0 5 0.66
Nov. 19	Sun 1 Limb.....	55.6	9.9	24.0	38.0	52.2	35	23.94	+ 0.86	.....	+15.92	15 35 40.72
	Sun 2 Limb.....	13.4	27.4	.....	.....	10.0	37	41.64	+ 0.86	.....	+15.92	15 37 58.42
	ϵ Piscium.....	0.3	13.6	27.1	40.5	53.8	31	27.06	+ 0.69	+15.99	+16.09	23 31 43.84
	α Andromedæ	21.5	36.4	51.6	6.6	21.7	59	51.56	+ 0.52	16.02	+16.10	0 0 8.18
	γ Pegasi	16.5	30.2	44.0	57.7	11.3	4	43.94	+ 0.62	16.09	+16.11	0 5 0.67
	β Ceti.....	49.1	3.2	17.2	31.1	45.2	35	17.16	+ 0.85	16.22	+16.12	0 35 34.14
	α Ursæ Minoris	53.0	5.0	20.5	34.5	49.5	2	20.50	-10.90	.....	+16.13	.....
	Juno	27.7	41.2	54.5	7.9	21.4	8	54.54	+ 0.78	.....	+16.13	1 9 11.45
	θ^1 Ceti	18.8	32.1	45.6	59.1	12.5	15	45.62	+ 0.78	16.21	+16.13	1 16 2.53
	β Arietis.....	.....	.....	33.1	47.2	1.5	45	33.13	+ 0.58	.....	+16.15	1 45 49.86
	θ^1 Arietis.....	30.6	44.7	58.7	12.7	26.8	8	58.70	+ 0.59	.....	+16.15	2 9 15.44
	Moon 1 Limb	2.8	17.1	31.7	46.2	0.6	25	31.68	+ 0.61	.....	+16.16	2 25 48.45
	ϵ Arietis	20.5	34.6	48.8	2.9	17.2	49	48.80	+ 0.58	.....	+16.17	2 50 5.55
	δ Arietis.....	45.7	59.7	13.8	27.8	41.8	2	13.76	+ 0.59	.....	+16.18	3 2 30.53
Nov. 20	Sun 1 Limb.....	5.4	19.7	33.5	47.6	1.7	39	33.58	+ 1.07	.....	+16.53	15 39 51.18
	Sun 2 Limb.....	23.2	37.3	51.5	5.5	19.8	41	51.46	+ 1.07	.....	+16.53	15 42 9.06
	Mercury 1 Limb.....	38.5	53.3	7.9	22.8	37.5	0	8.00	+ 1.13	.....	+16.57	17 0 25.70
	α Herculis.....	34.9	48.8	2.7	16.4	30.0	7	2.56	+ 0.77	+16.53	+16.57	17 7 19.90
	α Ophiuchi.....	44.6	58.2	11.8	25.4	39.0	27	11.80	+ 0.78	16.63	+16.58	17 27 29.16
	δ Ursæ Minoris.....	57.5	40.5	24.5	8.0	51.0	23	24.30	- 5.92	.....	+16.60	18 23 34.98
	β Lyrae.....	20.1	35.9	51.9	7.7	23.6	43	51.84	+ 0.58	16.63	+16.61	18 44 9.03
	ζ Aquilæ.....	17.6	31.3	44.8	58.6	12.3	57	44.92	+ 0.77	16.55	+16.61	18 58 2.30
	γ Aquilæ	53.8	7.2	20.8	34.3	47.7	38	20.76	+ 0.80	16.66	+16.63	19 38 38.19

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	interpo- lated.	
Nov. 20	α Ursæ Minoris.....	s.	s.	s.	s.	s.	m.	s.	s.	s.	s.	h. m. s.
		.....	.....	26.0	39.0	53.5	2	24.73	- 14.08	.....	+ 16.76	1 2 27.41
Nov. 21	ζ Pegasi	44.6	57.8	11.4	24.8	38.3	33	11.38	+ 0.71	+ 16.85	+ 17.17	22 33 29.26
	α Pegasi	2.6	16.4	29.8	43.8	57.6	56	30.04	+ 0.67	17.06	+ 17.18	22 56 47.89
	α Ursæ Minoris.....	50.0	.....	.....	35.0	48.0	2	19.47	- 11.96	.....	+ 17.23	.....
	γ Ceti.....	17.5	30.7	44.0	57.3	10.6	34	44.02	+ 0.76	17.26	+ 17.28	2 35 2.06
	α Ceti.....	11.5	25.1	38.4	51.6	5.0	53	38.32	+ 0.75	17.36	+ 17.29	2 53 56.36
	η Tauri.....	13.2	27.6	42.2	56.6	11.1	37	42.14	+ 0.60	17.50	+ 17.31	3 38 0.05
	37 Tauri.....	29.3	43.6	57.8	12.1	26.5	54	57.86	+ 0.61	.....	+ 17.31	3 55 15.78
	ν^1 Tauri.....	59.0	13.4	27.7	42.2	56.5	16	27.76	+ 0.61	.....	+ 17.32	4 16 45.69
	Moon 2 Limb	3.6	19.1	34.5	50.0	5.4	42	34.52	+ 0.60	.....	+ 17.34	4 42 52.46
	β Tauri	23.7	39.0	54.1	9.2	24.3	15	54.06	+ 0.56	17.54	+ 17.35	5 16 11.97
	26 Aurigæ	34.5	49.6	5.0	20.4	36.0	28	5.10	+ 0.54	.....	+ 17.36	5 28 23.00
Nov. 22	α Ophiuchi.....	43.7	57.2	10.6	24.2	38.0	27	10.74	+ 0.68	+ 17.79	+ 17.75	17 27 29.17
	δ Ursæ Minoris.	56.0	39.0	23.5	7.0	50.5	23	23.20	- 4.36	.....	+ 17.78	18 23 36.62
	β Lyrae.....	19.8	34.8	50.6	6.6	22.6	43	50.88	+ 0.54	17.61	+ 17.79	18 44 9.21
	ζ Aquilæ.....	16.5	30.2	43.7	57.4	11.2	57	43.80	+ 0.68	17.74	+ 17.79	18 58 2.27
	γ Aquilæ.....	52.6	6.1	19.6	33.1	46.5	38	19.58	+ 0.70	17.92	+ 17.81	19 38 38.09
	α Aquilæ	12.2	25.6	39.1	52.5	5.8	42	39.04	+ 0.71	17.89	+ 17.81	19 42 57.56
	α Ursæ Minoris	48.0	4.0	16.0	31.0	45.5	2	16.90	- 10.48	.....	+ 17.96	1 2 24.38
Nov. 23	Sun 1 Limb.....	.....	.....	.....	21.5	.....	52	7.30	+ 0.96	.....	+ 18.30	15 52 26.56
	Sun 2 Limb.....	57.6	11.8	26.0	40.2	54.3	54	25.98	+ 0.96	.....	+ 18.30	15 54 45.24
	α Herculis	33.6	47.1	10.8	14.5	28.3	7	0.86	+ 0.71	+ 18.30	+ 18.33	17 7 19.90
	α Ophiuchi	42.8	56.5	10.2	23.8	37.4	27	10.14	+ 0.72	18.35	+ 18.34	17 27 29.20
	α Lyrae.....	36.8	53.8	10.8	27.8	45.0	31	10.84	+ 0.50	18.41	+ 18.36	18 31 29.70
	ζ Aquilæ.....	15.8	29.4	43.1	56.7	10.5	57	43.10	+ 0.71	18.41	+ 18.37	18 58 2.18
	γ Aquilæ	52.2	5.5	19.1	32.5	46.2	38	19.10	+ 0.74	18.35	+ 18.39	19 38 38.23
	α Ursæ Minoris.	47.0	2.0	16.0	.....	.....	2	16.40	- 11.18	.....	+ 18.51	.....
Nov. 25	α Andromedæ	18.0	33.0	48.1	3.3	18.4	59	48.16	+ 0.58	+ 19.30	+ 19.39	0 0 8.13
	α Ursæ Minoris	42.0	58.0	12.5	26.5	40.0	2	11.80	- 8.27	.....	+ 19.41	.....
	Juno.....	49.5	.....	.....	29.7	43.1	9	16.29	+ 0.80	.....	+ 19.41	1 9 36.50
	θ^1 Ceti	15.7	28.7	42.5	55.7	9.4	15	42.40	+ 0.80	19.39	+ 19.41	1 16 2.61
	α Arietis.....	22.0	36.4	50.8	5.2	19.6	57	50.80	+ 0.62	19.50	+ 19.42	1 58 10.84
	γ Ceti.....	15.3	28.5	42.0	55.4	8.5	34	41.94	+ 0.74	19.37	+ 19.44	2 35 2.12
	α Ceti.....	9.6	22.9	36.2	49.5	2.7	53	36.18	+ 0.73	19.55	+ 19.44	2 53 56.35
Nov. 26	α Lyrae	35.3	52.4	9.4	26.4	43.3	31	9.36	+ 0.52	+ 19.83	+ 19.75	18 31 29.63
	α Andromedæ	17.4	32.5	47.4	2.7	17.8	59	47.56	+ 0.61	19.86	+ 19.86	0 0 8.03
	γ Pegasi.....	12.6	26.3	40.0	53.7	7.6	4	40.04	+ 0.70	19.86	+ 19.87	0 5 0.61
	α Ursæ Minoris	42.5	57.5	13.0	26.5	41.5	2	12.20	- 9.71	.....	+ 19.88	.....
	α Arietis.....	21.7	36.0	50.4	4.8	19.4	57	50.46	+ 0.65	19.81	+ 19.90	1 58 11.01
	γ Ceti.....	14.6	28.1	41.4	54.7	8.0	34	41.36	+ 0.77	19.93	+ 19.91	2 35 2.04
	α Ceti.....	9.3	22.4	35.6	49.1	2.5	53	35.78	+ 0.77	19.91	+ 19.92	2 53 56.47
Nov. 27	Sun 1 Limb.....	35.3	49.5	3.7	18.0	32.2	9	3.74	+ 0.99	.....	+ 20.20	16 9 24.93
	Sun 2 Limb.....	54.7	9.0	23.4	37.7	52.0	11	23.36	+ 0.99	.....	+ 20.20	16 11 44.55
	α Ophiuchi.....	41.0	54.6	8.2	21.8	35.4	27	8.20	+ 0.74	+ 20.27	+ 20.22	17 27 29.16
	δ Ursæ Minoris.....	53.0	36.0	19.5	2.5	46.0	23	19.40	- 4.30	.....	+ 20.23	.....
	β Lyrae.....	16.4	32.3	48.3	4.1	19.9	43	48.20	+ 0.59	20.19	+ 20.24	18 44 9.03
	ζ Aquilæ.....	13.8	27.5	41.3	54.8	8.5	57	41.18	+ 0.74	20.27	+ 20.24	18 58 2.16
	γ Aquilæ	50.2	3.7	17.2	30.7	44.2	38	17.20	+ 0.76	20.19	+ 20.25	19 38 38.21
	α Aquilæ	9.7	23.1	36.6	50.0	3.4	42	36.56	+ 0.77	20.26	+ 20.25	19 42 57.58
Nov. 28	ζ Cygni	15.6	30.8	46.0	1.2	16.5	5	46.02	+ 0.68	+ 20.26	+ 20.26	21 6 6.96
	β Aquarii.....	19.7	32.8	46.2	59.5	13.0	22	46.24	+ 0.97	20.33	+ 20.26	21 23 7.47

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpo- lated.			
Nov. 28	ϵ Pegasi.....	31.1	44.7	58.2	11.6	25.0	35	58.12	+ 0.85	+20.24	+20.26	21	36	19.23
	α Aquarii.....	45.8	59.2	12.4	25.6	39.0	57	12.40	+ 0.93	20.32	+20.26	21	57	33.59
	ζ Pegasi.....	41.0	54.4	7.7	21.5	34.8	33	7.88	+ 0.84	20.14	+20.27	22	33	28.99
	α Ursæ Minoris.....	44.0	58.0	13.5	28.0	44.0	2	13.50	- 12.19	.....	+20.29	.....	.....	.....
Nov. 30	ζ Cygni.....	.....	29.3	44.4	59.6	15.1	5	44.46	+ 0.71	+21.76	+21.68	21	6	6.85†
	α Arietis.....	19.5	34.0	48.4	2.7	17.1	57	48.34	+ 0.77	21.80	+21.75	1	58	10.86†
	η Tauri.....	8.7	23.3	38.0	52.3	6.7	37	37.80	+ 0.77	21.76	+21.83	3	38	0.40†
Dec. 2	α Cygni.....	56.5	.....	.....	52.6	11.4	35	33.94	+ 0.58	+22.83	+22.83	.....	.....	.....†
Dec. 5	α Lyrae.....	30.6	47.6	4.7	.....	.....	31	4.63	+ 0.64	+24.37	+24.33	18	31	29.60†
	ζ Aquilæ.....	.....	.....	.....	50.6	4.4	57	37.00	+ 0.88	24.29	+24.33	18	58	2.21†
Dec. 6	Sun 1 Limb.....	.....	.....	.....	7.5	22.0	47	53.14	+ 1.19	.....	+24.33	16	48	18.66
	Sun 2 Limb.....	45.1	59.6	13.8	28.2	43.0	50	13.94	+ 1.19	.....	+24.33	16	50	39.46
	α Ophiuchi.....	36.8	50.5	4.1	17.6	31.4	27	4.08	+ 0.89	+24.28	+24.34	17	27	29.31
	α Lyrae.....	30.7	47.7	4.8	21.8	38.8	31	4.76	+ 0.64	24.24	+24.36	18	31	29.76
	α Aquilæ.....	5.3	18.7	32.2	45.6	59.1	42	32.18	+ 0.92	24.44	+24.38	19	42	57.48
	α Cygni.....	54.9	13.5	32.3	50.9	9.6	35	32.24	+ 0.58	24.45	+24.40	20	35	57.22
	ζ Cygni.....	.....	26.4	41.6	56.8	12.1	5	41.59	+ 0.74	24.51	+24.41	21	6	6.74

Dec. 7	Sun 1 Limb.....	45.8	0.2	14.4	28.8	43.1	52	14.46	+ 1.24	.....	+24.85	16	52	40.55
	Sun 2 Limb.....	6.8	21.1	35.6	50.1	4.6	54	35.64	+ 1.24	.....	+24.85	16	55	1.73
	α Ophiuchi.....	36.2	49.8	3.4	17.2	30.8	27	3.48	+ 0.94	+24.83	+24.86	17	27	29.28
	δ Ursæ Minoris.....	46.0	.....	12.0	56.0	39.5	23	12.48	- 5.43	.....	+24.88	18	23	31.93
	β Lyrae.....	11.5	27.4	43.2	59.1	15.1	43	43.26	+ 0.76	24.89	+24.89	18	44	8.91
	ζ Aquilæ.....	8.8	22.6	36.4	50.0	3.7	57	36.30	+ 0.93	24.93	+24.90	18	58	2.13
	α Aquilæ.....	4.7	18.2	31.6	45.2	58.5	42	31.64	+ 0.97	24.92	+24.91	19	42	57.52
	α Cygni.....	54.4	13.0	31.7	50.4	9.0	35	31.70	+ 0.61	24.94	+24.93	20	35	57.24
	α Ursæ Minoris.....	35.5	49.0	5.0	21.0	35.5	2	5.20	- 13.20	.....	+25.03	1	2	17.03

Dec. 11	INSTRUMENT REVERSED.													
Dec. 13	α Pegasi.....	51.4	5.0	18.8	32.5	46.2	56	18.78	+ 0.68	+28.05	+28.05	.....	.....	.....
	Moon 1 Limb.....	.....	.....	23.8	.....	51.0	17	23.76	+ 0.83	.....	+28.06	23	17	52.65
Dec. 14	α Lyrae.....	26.9	43.8	0.9	18.0	35.0	31	0.92	+ 0.38	+28.33	+28.33	.....	.....	.....
Dec. 15	Moon 1 Limb.....	52.2	6.2	.....	.....	.....	59	19.92	+ 0.67	.....	+29.12	0	59	49.71
	α Ursæ Minoris.....	.....	.....	.....	14.0	30.5	1	59.35	- 17.42	.....	+29.12	.....	.....	.....
	η Piscium.....	59.3	13.0	26.7	40.5	54.3	22	26.76	+ 0.61	.....	+29.13	1	22	56.50
Dec. 16	ζ Cygni.....	6.2	21.3	36.7	52.0	7.3	5	36.70	+ 0.44	+29.59	+29.62	21	6	6.76
	α Tauri.....	48.2	2.1	15.9	29.7	43.5	26	15.88	+ 0.56	29.81	+29.81	4	26	46.25
	α Aurigæ.....	46.6	5.7	24.7	43.8	2.8	4	24.72	+ 0.24	29.88	+29.82	5	4	54.78
	β Orionis.....	55.2	8.5	22.1	35.4	49.0	6	22.04	+ 0.72	29.84	+29.82	5	6	52.58
	β Tauri.....	12.3	27.2	42.4	57.5	12.6	15	42.40	+ 0.46	29.76	+29.83	5	16	12.69
Dec. 17	(a) α Andromedæ.....	7.1	22.3	37.4	52.5	7.5	59	37.36	+ 0.12	+30.29	+30.29	.....	.....	.....
Dec. 18	α Aurigæ.....	45.9	5.0	24.0	43.2	2.3	4	24.08	+ 0.07	+30.72	+30.75	5	4	54.90
	β Orionis.....	55.0	8.5	21.8	35.2	48.5	6	21.80	+ 0.14	30.68	+30.75	5	6	52.69
	β Tauri.....	11.5	26.6	41.7	56.8	11.9	15	41.70	+ 0.12	30.82	+30.75	5	16	12.57
	δ Orionis.....	54.0	7.5	20.8	34.0	47.3	23	20.72	+ 0.14	30.77	+30.75	5	23	51.61
	ϵ Orionis.....	9.8	23.1	36.5	49.8	3.0	27	36.44	+ 0.14	30.78	+30.75	5	28	7.33

(a) The Instrument was moved in azimuth to bring it nearer the Meridian.

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.		
		I.	II.	III.	IV.	V.				observed.	interpolated.			
Dec. 19	Sun 2 Limb.....	s.	s. 15.2	s. 29.8	s. 44.2	s. 59.0	m. 47	s. 29.80	+ 0.09	.....	+ 30.96	h. 17	m. 48	s. 0.85
Dec. 20	α Tauri.....	46.9	0.8	14.8	28.5	42.2	26	14.64	+ 0.08	+ 31.55	+ 31.59	4	26	46.31
	α Aurigæ.....	45.0	4.0	23.1	42.2	1.3	4	23.12	+ 0.03	31.74	+ 31.60	5	4	54.75
	β Orionis.....	54.2	7.5	21.0	34.4	47.8	6	20.98	+ 0.07	31.58	+ 31.60	5	6	52.65
	β Tauri.....	10.8	26.0	41.1	56.2	11.2	15	41.06	+ 0.06	31.54	+ 31.61	5	16	12.73
	δ Ursæ Minoris S. P.	31.0	14.0	56.5	.....	.....	22	57.10	+ 1.87	.....	+ 31.62	.....	.....	.....
Dec. 21	Sun 1 Limb.....	30.5	45.0	59.5	14.0	28.6	53	59.52	- 0.02	.....	+ 31.81	17	54	31.31
	Sun 2 Limb.....	52.9	7.5	22.0	36.5	51.1	56	22.00	- 0.02	.....	+ 31.81	17	56	53.79
	δ Ursæ Minoris.....	.....	.....	59.5	43.5	27.0	23	0.07	- 1.39	.....	+ 31.82	.....	.....	.....
	ζ Aquilæ.....	3.1	16.7	30.4	44.1	57.5	57	30.36	+ 0.01	+ 31.82	+ 31.83	18	58	2.20
	α Cygni.....	47.8	6.6	25.3	44.0	2.7	35	25.28	- 0.02	31.80	+ 31.86	20	35	57.12
	ζ Cygni.....	4.1	19.5	34.7	50.0	5.4	5	34.74	0.00	31.94	+ 31.87	21	6	6.61
	β Aquarii.....	8.6	22.1	35.5	48.8	2.2	22	35.44	0.00	31.92	+ 31.87	21	23	7.31
	τ Geminorum.....	.....	.....	26.6	42.1	57.5	0	26.66	0.00	.....	+ 32.04	7	0	58.70
	δ Geminorum.....	.....	.....	3.4	.....	32.2	10	3.46	0.00	32.00	+ 32.04	7	10	35.50
	α Geminorum preced.	20.8	.....	52.3	.....	23.7	23	52.27	0.00	} 32.07 {	+ 32.05	7	24	24.32
	α Geminorum follow.	.....	37.1	.....	8.5	.....	23	52.80	0.00		+ 32.05	7	24	24.85
	Moon 2 Limb.....	50.5	5.7	20.8	36.0	51.2	33	20.84	0.00	.....	+ 32.05	7	33	52.89
Dec. 22	α Ophiuchi.....	29.6	43.2	56.8	10.4	24.0	26	56.80	- 0.08	+ 32.72	+ 32.70	17	27	29.42
Dec. 23	Sun 1 Limb.....	23.0	37.4	52.0	6.5	21.1	2	52.00	- 0.18	.....	+ 32.71	18	3	24.53
	Sun 2 Limb.....	45.4	59.8	14.4	28.8	43.4	5	14.36	- 0.18	.....	+ 32.71	18	5	46.89
	δ Ursæ Minoris.....	31.0	14.0	57.0	41.0	25.0	22	57.60	+ 0.01	.....	+ 32.72	.....	.....	.....
	β Lyræ.....	4.5	20.4	36.4	52.3	8.2	43	36.36	- 0.06	32.62	+ 32.72	18	44	9.02
	γ Aquilæ.....	38.5	52.0	5.5	19.0	32.6	38	5.52	- 0.09	32.66	+ 32.74	19	38	38.17
	α Aquilæ.....	58.1	11.4	24.8	38.2	51.6	42	24.82	- 0.09	32.79	+ 32.74	19	42	57.47
	α Cygni.....	47.0	5.7	24.4	43.1	1.8	35	24.40	- 0.04	32.67	+ 32.75	20	35	57.11
	α Pegasi.....	47.0	0.8	14.5	28.2	42.0	56	14.50	- 0.08	32.99	+ 32.79	22	56	47.21
Dec. 24	ι Piscium.....	43.6	57.0	10.3	23.6	37.0	31	10.30	- 0.05	+ 33.14	+ 33.09	23	31	43.34
	α Andromedæ.....	4.3	19.4	34.5	49.7	4.6	59	34.50	- 0.02	33.20	+ 33.09	0	0	7.57
	γ Pegasi.....	59.9	13.4	27.2	41.1	54.6	4	27.24	- 0.03	33.10	+ 33.10	0	5	0.31
	α Ursæ Minoris.....	1.0	17.0	32.0	47.5	2.5	1	32.00	- 0.31	.....	+ 33.10	.....	.....	.....
	θ^1 Ceti.....	2.6	15.9	29.4	43.0	56.3	15	29.44	- 0.08	33.02	+ 33.11	1	16	2.47
	Juno.....	14.5	27.7	41.2	54.5	8.0	25	41.18	- 0.07	.....	+ 33.11	1	26	14.22
	α Arietis.....	9.0	23.4	37.7	52.2	6.5	57	37.76	- 0.03	33.06	+ 33.11	1	58	10.84
	A. S. C. 315.....	42.1	.....	.....	.....	35.6	47	8.85	- 0.05	.....	+ 33.12	2	47	41.92
	.....	.....	55.0	8.5	22.0	.....	.....	8.50	- 0.05	.....	.....	.....	.....	.....†
	λ Ceti.....	9.5	.....	.....	.....	3.4	50	36.45	- 0.05	.....	.....	.....	.....	.....†
	.....	.....	23.5	36.9	50.4	.....	.....	36.93	- 0.05	.....	+ 33.12	2	51	10.00
Dec. 25	Sun 1 Limb.....	15.4	30.1	44.6	59.0	13.7	11	44.56	- 0.10	.....	+ 33.23	18	12	17.69
	Sun 2 Limb.....	37.8	52.5	6.8	21.5	36.0	14	6.92	- 0.10	.....	+ 33.23	18	14	40.05
	δ Ursæ Minoris.....	.....	14.5	57.0	40.5	24.0	22	57.40	- 0.61	.....	+ 33.24	.....	.....	.....
	ζ Aquilæ.....	1.6	15.4	29.0	42.8	56.4	57	29.04	- 0.04	+ 33.21	+ 33.24	18	58	2.24
	γ Aquilæ.....	37.9	51.4	5.0	18.4	31.8	38	4.90	- 0.05	33.24	+ 33.25	19	38	38.10
	α Aquilæ.....	57.5	10.8	24.3	37.6	51.2	42	24.28	- 0.05	33.29	+ 33.25	19	42	57.48
	β Aquilæ.....	26.4	39.6	53.0	6.4	19.7	46	53.02	- 0.05	33.23	+ 33.25	19	47	26.22
	α Cygni.....	46.2	5.0	23.8	42.6	1.3	35	23.78	- 0.03	33.26	+ 33.26	20	35	57.01
	Uranus.....	21.3	34.8	48.2	1.6	15.2	57	48.20	- 0.07	.....	+ 33.29	22	58	21.42
Dec. 26	Sun 1 Limb.....	41.6	56.2	10.7	25.1	39.6	16	10.64	- 0.08	.....	+ 33.61	18	16	44.17
	Sun 2 Limb.....	4.0	18.6	33.0	47.5	2.0	18	33.02	- 0.08	.....	+ 33.61	18	19	6.55
	δ Ursæ Minoris.....	.....	.....	56.5	40.0	24.0	22	56.93	- 0.41	.....	+ 33.61	18	23	30.13
	β Lyræ.....	3.6	19.4	35.4	51.3	7.1	43	35.36	+ 0.01	+ 33.57	+ 33.62	18	44	8.99

Date.	OBJECT OBSERVED.	Wire.					Reduction to Mean of Wires.		Correction of Instru- ment.	Correction of Clock		Apparent Right Ascension observed.
		I.	II.	III.	IV.	V.				observed.	inter- polated.	
Dec: 26	γ Aquilæ.....	37.5	51.0	4.5	18.1	31.5	38	4.52	- 0.02	+ 33.59	+ 33.63	19 38 38.13
	α Aquilæ.....	57.1	10.4	24.0	37.3	50.6	42	23.88	- 0.02	33.66	+ 33.64	19 42 57.50
	α Cygni.....	45.9	4.6	23.2	42.0	0.8	35	23.30	+ 0.01	33.69	+ 33.65	20 35 56.96
	ζ Cygni.....	2.4	17.6	33.0	48.2	3.5	5	32.94	0.00	33.70	+ 33.66	21 6 6.60
	α Ursæ Minoris.....	1.5	16.0	31.0	44.5	0.0	1	30.60	- 1.03	.....	+ 33.74	1 2 3.31
	Moon 2 Limb.....	.....	.....	.....	.....	5.8	56	38.64	0.00	.....	+ 34.09	11 57 12.73
Dec. 27	α Cygni.....	45.1	4.0	22.8	41.7	0.4	35	22.80	+ 0.03	+ 34.16	+ 34.25	20 35 57.08
	α Pegasi.....	45.7	49.4	12.9	26.6	40.4	56	13.00	+ 0.02	34.35	+ 34.28	22 56 47.30
	Uranus.....	33.0	46.5	59.8	13.0	26.5	57	59.76	- 0.01	.....	+ 34.28	22 58 34.03
	ι Piscium.....	42.5	55.8	9.1	22.3	35.7	31	9.08	+ 0.01	34.27	+ 34.29	23 31 43.38
	α Andromedæ.....	3.2	18.3	33.1	48.3	3.4	59	33.26	+ 0.03	34.35	+ 34.29	0 0 7.58
	γ Pegasi.....	58.6	12.4	26.1	39.5	53.4	4	26.00	+ 0.02	34.26	+ 34.29	0 5 0.31
	α Ursæ Minoris.....	0.5	15.5	30.5	44.0	58.0	1	29.70	- 1.37	.....	+ 34.30	.....
	Juno.....	10.0	23.4	36.6	49.9	3.4	28	36.66	- 0.01	.....	+ 34.31	1 29 10.96
	21 Virginis.....	30.2	43.8	57.2	10.5	24.2	24	57.18	+ 0.18	.....	+ 34.27	12 25 31.63
	(a) Moon 1 Limb.....	34.8	48.2	2.0	16.0	.....	39	2.10	+ 0.19	.....	+ 34.27	12 39 36.56
	Moon 2 Limb.....	38.8	52.4	6.2	20.0	33.8	41	6.24	+ 0.19	.....	+ 34.27	12 41 40.70
	α Ursæ Minoris S. P.....	53.0	.....	23.5	.....	.....	1	23.50	+ 4.40	.....	+ 34.28	13 2 2.18
	Mercury 2 Limb.....	13.4	27.8	42.0	56.2	10.5	8	41.98	+ 0.17	.....	+ 34.33	17 9 16.48
	δ Ursæ Minoris.....	30.0	14.0	57.5	.....	24.5	22	57.38	- 1.55	.....	+ 34.35	18 23 30.18
Dec. 28	Sun 1 Limb.....	33.4	47.8	2.4	16.9	31.2	25	2.34	+ 0.17	.....	+ 34.35	18 25 36.86
	Sun 2 Limb.....	55.7	10.2	24.6	39.2	53.8	27	24.70	+ 0.17	.....	+ 34.35	18 27 59.22
	β Lyrae.....	2.6	18.6	34.5	50.4	6.2	43	34.46	+ 0.16	+ 34.33	+ 34.36	18 44 8.98
	γ Aquilæ.....	36.5	50.1	3.5	17.0	30.6	38	3.54	+ 0.18	34.38	+ 34.37	19 38 38.09
	α Aquilæ.....	56.0	9.5	23.0	36.4	49.8	42	22.94	+ 0.18	34.41	+ 34.38	19 42 57.50
	α Cygni.....	45.3	3.7	22.5	41.1	59.8	35	22.48	+ 0.14	34.36	+ 34.39	20 35 57.01
	ζ Cygni.....	1.5	16.7	32.0	47.4	2.6	5	32.04	+ 0.17	34.42	+ 34.40	21 6 6.61
	Uranus.....	38.7	52.5	5.6	19.2	32.4	58	5.68	+ 0.18	.....	+ 34.45	22 58 40.31
	α Ursæ Minoris.....	0.5	16.0	30.5	45.0	3.0	1	31.00	- 3.80	.....	+ 34.50	1 2 1.70
	Juno.....	11.1	24.5	37.7	51.1	4.4	29	37.76	+ 0.18	.....	+ 34.51	1 30 12.45
	49 Virginis.....	29.2	42.6	56.2	9.7	23.1	58	56.16	+ 0.15	.....	+ 34.93	12 59 31.24
	α Ursæ Minoris S. P.....	.....	6.0	22.0	36.0	52.5	1	21.38	+ 5.11	.....	+ 34.93	.....
	α Virginis.....	44.1	57.6	11.1	24.7	38.2	16	11.14	+ 0.15	+ 34.94	+ 34.94	13 16 46.23
	(a) Moon 1 Limb.....	22.4	36.3	50.2	4.3	18.1	23	50.26	+ 0.16	.....	+ 34.95	13 24 25.37
	Moon 2 Limb.....	27.7	41.8	55.8	10.0	24.1	25	55.88	+ 0.16	.....	+ 34.95	13 26 30.99
	89 Virginis.....	8.0	22.1	36.1	50.0	3.8	40	36.00	+ 0.14	.....	+ 34.95	13 41 11.09
	α Bootis.....	18.5	32.6	46.8	0.8	15.0	7	46.74	+ 0.14	34.89	+ 34.97	14 8 21.85
	ϵ Bootis.....	54.4	9.5	24.4	39.5	54.6	37	24.48	+ 0.13	34.98	+ 34.98	14 37 59.59
	α^2 Libræ.....	59.0	12.6	26.5	40.3	54.1	41	26.50	+ 0.15	35.08	+ 34.99	14 42 1.64
Dec. 29	89 Virginis.....	7.2	21.3	35.2	49.2	3.0	40	35.18	+ 0.14	.....	+ 35.69	13 41 11.01
	η Bootis.....	59.8	13.8	28.0	42.1	56.2	46	27.98	+ 0.14	+ 35.86	+ 35.70	13 47 3.82
	α Bootis.....	17.8	31.9	46.1	0.3	14.5	7	46.12	+ 0.14	35.55	+ 35.70	14 8 21.96
Dec. 31	Uranus.....	57.9	11.3	24.7	37.9	51.5	58	24.66	+ 0.15	.....	+ 36.32	22 59 1.13
	γ Ceti.....	59.0	12.2	25.5	38.7	52.1	34	25.50	+ 0.15	+ 36.31	+ 36.36	2 35 2.01
	α Ceti.....	53.3	6.6	20.0	33.2	46.4	53	19.90	+ 0.15	36.36	+ 36.36	2 53 56.41
	η Tauri.....	55.1	9.4	23.8	38.4	52.8	37	23.90	+ 0.14	36.36	+ 36.37	3 38 0.41
	γ^1 Eridani.....	31.4	45.2	59.0	12.6	26.2	49	58.88	+ 0.15	36.40	+ 36.37	3 50 35.40
	α Tauri.....	42.2	56.0	9.7	23.6	37.3	26	9.76	+ 0.14	36.39	+ 36.37	4 26 46.27

(a) Dark or unenlightened Limb.

ELEMENTS
FOR
REDUCING THE OBSERVATIONS
MADE WITH
THE TRANSIT INSTRUMENT;
AND
MEAN RIGHT ASCENSIONS OF THE STARS OBSERVED,
FOR JANUARY 1, 1839.

OBSERVATIONS OF MERIDIAN MARKS.

Date.	Wire III. East of		Sum.	Illuminated End of Axis.	Date.	Wire III. East of		Sum.	Illuminated End of Axis.
	North mark.	South mark.				North mark.	South mark.		
1838,	s.	s.	s.		1839,	s.	s.	s.	
Dec. 4	- 1.21	.....	.....	East	June 30	- 0.96	+ 1.43	+ 0.47	East
10	- 1.24	+ 1.63	+ 0.39	.....	July 3	- 0.86	+ 1.38	+ 0.52	.....
21	- 1.35	.....	.....	.....	4	- 0.81	+ 1.36	+ 0.55	.....
25	- 1.29	.....	.....	.....	5	- 0.85	+ 1.35	+ 0.50	.....
29	- 1.38	.....	.....	.....	8	- 0.83	+ 1.31	+ 0.48	.....
30	- 1.27	+ 1.67	+ 0.40	.....	15	- 0.81	+ 1.29	+ 0.48	.....
1839,					19	- 0.81	+ 1.28	+ 0.47	.....
Jan. 3	- 1.36	+ 1.69	+ 0.33	.....	22	- 0.80	+ 1.29	+ 0.49	.....
4	.....	+ 1.67	.....	.....			Mean	+ 0.489	
7	- 1.41	+ 1.79	+ 0.38	.....				
		Mean	+ 0.375						
7	- 1.62	+ 1.59	- 0.03	West	Sept. 16	- 1.15	+ 1.09	- 0.06	West
11	- 1.72	+ 1.68	- 0.04	.....		- 1.21	+ 1.19	- 0.02	.....
15	- 1.59	.....	.....	.....			Mean	- 0.040	
25	- 1.61	.....	.....	.....		
Feb. 6	- 1.67	.....	.....	.....	Oct. 29	- 1.08	+ 1.52	+ 0.44	East
8	- 1.53	.....	.....	.....	9	- 1.21	+ 1.67	+ 0.46	.....
9	- 1.47	+ 1.48	+ 0.01	.....	10	- 1.19	+ 1.63	+ 0.44	.....
		Mean	- 0.020		13	- 1.14	.....	.....	.....
							Mean	+ 0.447	
9	- 1.31	+ 1.67	+ 0.36	East	14	- 1.39	.....	.....	West
11	- 1.29	+ 1.65	+ 0.36	.....	15	- 1.35	.....	.....	.....
16	- 1.25	+ 1.63	+ 0.38	.....	16	- 1.41	+ 1.40	- 0.01	.....
20	- 1.49	+ 1.89	+ 0.40	.....	17	- 1.41	.....	.....	.....
March 6	.....	+ 1.68	.....	.....	20	- 1.50	.....	.....	.....
		Mean	+ 0.375		22	- 1.43	.....	.....	.....
					23	- 1.41	.....	.....	.....
16	- 1.58	.....	.....	West	24	- 1.35	.....	.....	.....
29	- 1.55	.....	.....	.....	25	- 1.37	.....	.....	.....
April 29	- 1.10	+ 1.52	+ 0.42	East	27	- 1.45	.....	.....	.....
May 19	- 1.18	+ 1.59	+ 0.41	.....	28	- 1.51	+ 1.51	0.00	.....
21	- 1.07	.....	.....	.....	29	- 1.53	+ 1.52	- 0.01	.....
		Mean	+ 0.415		30	- 1.56	+ 1.55	- 0.01	.....
					31	- 1.56	+ 1.57	+ 0.01	.....
					Nov. 2	- 1.56	+ 1.56	0.00	.....
					5	- 1.51	.....	.....	.....
					6	- 1.51	.....	.....	.....
					7	- 1.52	.....	.....	.....
					8	- 1.51	+ 1.54	+ 0.03	.....
June 29	- 1.28	.....	.....	West	10	- 1.46	.....	.....	.....
7	- 1.16	.....	.....	.....			Mean	+ 0.001	
8	- 1.15	+ 1.06	- 0.09	.....				
8	- 1.17	+ 1.09	- 0.08	.....				
9	- 1.18	+ 1.07	- 0.11	.....				
9	- 1.12	+ 1.01	- 0.11	.....				
11	- 1.13	+ 1.04	- 0.09	.....	12	- 1.23	.....	.....	East
17	- 0.96	+ 0.83	- 0.13	.....	14	- 1.21	.....	.....	.....
19	- 1.15	+ 1.01	- 0.14	.....	15	- 1.16	.....	.....	.....
21	- 1.07	+ 0.91	- 0.16	.....	19	- 1.20	+ 1.57	+ 0.37	.....
		Mean	- 0.114		21	- 1.25	+ 1.65	+ 0.40	.....
					22	- 1.27	.....	.....	.....
27	- 0.89	+ 1.33	+ 0.44	East	24	- 1.33	+ 1.70	+ 0.37	.....
					25	- 1.24	.....	.....	.....

Date.	Wire III. East of		Sum.	Illuminated End of Axis.	Date.	Wire III. East of		Sum.	Illuminated End of Axis.
	North mark.	South mark.				North mark.	South mark.		
1839, Nov. 29	^{s.} - 1.49	^{s.} + 1.87	^{s.} + 0.38	East	1839, Dec. 25	^{s.} - 0.66	^{s.}	^{s.}	West
30	- 1.44	.....	.....	.....	28	- 0.95	.....	.....	.....
Dec. 8	- 1.47	.....	.....	.....	1840, Jan. 3	- 0.83	.....	.....	.....
		Mean	+ 0.380		9	- 0.97	.....	.....	.....
12	- 1.63	.....	.....	West	13	- 0.78	.....	.....	.....
17	- 1.53	.....	.....	.....(a)	14	- 0.81	.....	.....	.....
18	- 0.87	+ 0.92	+ 0.05	.....	17	- 0.70	.....	.....	.....
21	- 0.72	.....	.....	.....	18	- 0.83	+ 0.77	- 0.06	.....
24	- 0.67	+ 0.66	- 0.01	.....			Mean	- 0.007	

(a) After this observation the Instrument was moved in azimuth.

INCLINATION OF AXIS.

Date.	West End high.	Thermo- meter.	Determined by	Date.	West End high.	Thermo- meter.	Determined by
1838, December 31	^{s.} + 0.174	35.4	Therm.	1839, July 2	^{s.} - 0.034	.....	Level
1839, January 7	+ 0.145	36.0	Therm.	8	- 0.112	59.2	Therm.
14	+ 0.131	37.3	Therm.	15	- 0.059	54.4	Therm.
21	+ 0.168	34.0	Therm.	22	- 0.079	56.2	Therm.
23	+ 0.186	.....	Level	26	- 0.123	.....	Level
28	+ 0.192	31.8	Therm.	29	- 0.084	56.7	Therm.
February 4	+ 0.165	34.2	Therm.	August 5	- 0.099	58.0	Therm.
11	+ 0.107	39.5	Therm.	12	- 0.058	54.3	Therm.
18	+ 0.190	32.0	Therm.	19	- 0.007	49.7	Therm.
25	+ 0.166	34.1	Therm.	26	- 0.059	54.4	Therm.
28	+ 0.153	.....	Level	September 2	- 0.048	53.4	Therm.
March 4	+ 0.139	36.6	Therm.	9	- 0.057	54.2	Therm.
11	+ 0.199	31.2	Therm.	13	- 0.023	.....	Level
18	+ 0.164	33.6	Level	16	- 0.032	52.0	Therm.
25	+ 0.143	36.2	Therm.	23	- 0.016	50.5	Therm.
April 1	+ 0.151	35.5	Therm.	30	- 0.001	49.2	Therm.
8	+ 0.148	35.8	Therm.	October 7	+ 0.030	46.4	Therm.
15	+ 0.083	41.6	Therm.	11	+ 0.009	.....	Level
16	+ 0.057	.....	Level	14	+ 0.007	48.5	Therm.
22	+ 0.059	43.8	Therm.	21	+ 0.037	45.8	Therm.
29	+ 0.018	47.5	Therm.	28	+ 0.088	43.6	Level
May 6	+ 0.061	43.6	Therm.	November 4	+ 0.057	41.0	Therm.
10	+ 0.100	.....	Level	11	+ 0.046	45.0	Therm.
13	+ 0.051	44.5	Therm.	12	+ 0.053	.....	Level
20	+ 0.006	48.6	Therm.	18	+ 0.058	43.9	Therm.
27	- 0.028	51.6	Therm.	25	+ 0.107	39.5	Therm.
June 3	+ 0.010	48.2	Therm.	December 2	+ 0.159	34.8	Therm.
10	- 0.071	53.8	Level	9	+ 0.173	33.5	Therm.
17	- 0.100	58.1	Therm.	11	+ 0.170	.....	Level
24	- 0.065	55.0	Therm.	16	+ 0.118	38.5	Therm.
July 1	- 0.049	53.5	Therm.	23	+ 0.079	42.0	Therm.
				31	+ 0.130	37.4	Therm.

DEVIATION OF THE INSTRUMENT FROM THE POLE, OR THE QUANTITY n , DEDUCED FROM
OBSERVATIONS.

Date.	OBJECTS.	$n =$	Date.	OBJECTS.	$n =$
1839, Jan. 1	α Ursæ Minoris.....	$^s. - 0.37$	1839, Jan. 27	μ Geminorum.....	$^s. - 0.38$
	δ Ursæ Minoris S. P.			δ Ursæ Minoris S. P.	
	δ Ursæ Minoris	$- 0.36$	28	α Ursæ Minoris.....	$- 0.43$
2	δ Ursæ Minoris S. P.			δ Ursæ Minoris S. P.	
3	α Ursæ Minoris.....	$- 0.36$	29	δ Orionis.....	$- 0.43$
	θ^1 Ceti.....			δ Ursæ Minoris S. P.	
4	α Cygni	$- 0.37$	30	μ Geminorum.....	$- 0.57$
	α Ursæ Minoris.....			δ Ursæ Minoris S. P.	
7	α Ursæ Minoris.....	$- 0.38 (a)$	31	α Ursæ Minoris.....	$- 0.49$
	δ Ursæ Minoris S. P.			θ^1 Ceti.....	
	α Ursæ Minoris S. P.				
8	α Aquilæ	$- 0.40$	Feb. 1	δ Ursæ Minoris	
	α Pegasi.....			ζ Cygni	$- 0.47$
	δ Ursæ Minoris S. P.			α Ursæ Minoris.....	
	α^2 Libræ			α Arietis	
	δ Ursæ Minoris	$- 0.46$	2	α Pegasi.....	$- 0.48$
9	α Pegasi.....			α Ursæ Minoris.....	
	α Ursæ Minoris.....		4	δ Ursæ Minoris.....	$- 0.39$
	δ Ursæ Minoris	$- 0.44$	5	δ Ursæ Minoris S. P.	
10	α Cygni.....		6	α Ursæ Minoris.....	$- 0.39$
11	α Ursæ Minoris.....	$- 0.38$		δ Ursæ Minoris S. P.	
	δ Ursæ Minoris S. P.		7	β Tauri	$- 0.31$
	δ Ursæ Minoris			δ Ursæ Minoris S. P.	
12	α Cygni.....	$- 0.35$	8	North Mark.....	$- 0.34$
	ϵ Pegasi.....		9	δ Ursæ Minoris.....	$- 0.29 (a)$
	α Ursæ Minoris.....			α Lyræ.....	
13	δ Ursæ Minoris	$- 0.32$	11	μ Geminorum.....	$- 0.37$
14	δ Ursæ Minoris S. P.			δ Ursæ Minoris S. P.	
15	α Ursæ Minoris.....	$- 0.38$	12	α Ursæ Minoris.....	$- 0.33$
	δ Ursæ Minoris S. P.			δ Ursæ Minoris S. P.	
	δ Ursæ Minoris	$- 0.38$		δ Ursæ Minoris	
16	δ Ursæ Minoris S. P.		13	α Andromedæ	$- 0.33$
	δ Ursæ Minoris			γ Pegasi.....	
17	δ Ursæ Minoris S. P.	$- 0.43$		α Ursæ Minoris.....	
	δ Ursæ Minoris		14	α Ursæ Minoris.....	$- 0.31$
18	δ Ursæ Minoris	$- 0.43$		δ Ursæ Minoris S. P.	
19	δ Ursæ Minoris S. P.			δ Ursæ Minoris	
20	β Ceti.....	$- 0.39$	15	Sun	$- 0.31$
	α Ursæ Minoris.....			α Pegasi.....	
21	α Ursæ Minoris.....	$- 0.38$		α Ursæ Minoris.....	$- 0.26$
	δ Ursæ Minoris S. P.		16	α Ursæ Minoris.....	
22	α Ursæ Minoris.....	$- 0.49$		β Orionis	$- 0.37$
	δ Ursæ Minoris S. P.		18	γ Pegasi	
23	δ Orionis	$- 0.39$		α Ursæ Minoris.....	$- 0.31$
	δ Ursæ Minoris S. P.			δ Ursæ Minoris.....	
24	α Ursæ Minoris.....	$- 0.41$	19	Sun	
	α Arietis		20	North and South Marks...	$- 0.44$
25	North Mark.....	$- 0.34$	22	ϵ Orionis	
26	ϵ Pegasi	$- 0.39$		δ Ursæ Minoris S. P.	$- 0.52$
	α Ursæ Minoris.....				

(a) Instrument reversed.

Date.	OBJECTS.	$n =$	Date.	OBJECTS.	$n =$
1839, Feb. 23	α Ursæ Minoris.....	$- 0.47$	1839, April 19	α Ursæ Minoris.....	$- 0.44$
	δ Ursæ Minoris S. P.....		20	α Ursæ Minoris S. P.....	
25	α Ursæ Minoris.....	$- 0.44$	23	α Leonis.....	$- 0.53$
	δ Ursæ Minoris S. P.....			α Ursæ Minoris S. P.....	
26	α Ursæ Minoris.....	$- 0.44$	24	β Geminorum.....	$- 0.47$
	α Canis Majoris.....			α Ursæ Minoris S. P.....	
27	α Ursæ Minoris.....	$- 0.43$	26	α Ursæ Minoris S. P.....	$- 0.41$
	δ Ursæ Minoris S. P.....			α Virginis.....	
March 2	α Ursæ Minoris.....	$- 0.41$	27	α Ursæ Minoris S. P.....	$- 0.43$
	δ Ursæ Minoris S. P.....			α Virginis.....	
4	α Ursæ Minoris.....	$- 0.33$	29	12 Canum Venat.....	$- 0.44$
	α Arietis.....			α Ursæ Minoris S. P.....	
6	South Mark.....	$- 0.35$	30	12 Canum Venat.....	$- 0.41$
9	α Ursæ Minoris.....	$- 0.51$		α Ursæ Minoris S. P.....	
	δ Ursæ Minoris S. P.....		May 2	δ Leonis.....	$- 0.41$
12	β Tauri.....	$- 0.70$		α Ursæ Minoris S. P.....	
	δ Ursæ Minoris S. P.....		6	α Ursæ Minoris S. P.....	$- 0.34$
18	μ Geminorum.....	$- 0.32$ (a)		α Virginis.....	
	δ Ursæ Minoris S. P.....			α Ursæ Minoris.....	$- 0.36$
	α Leonis.....		7	α Ursæ Minoris S. P.....	$- 0.36$
	α Ursæ Minoris S. P.....		9	α Ursæ Minoris S. P.....	$- 0.41$
19	α Ursæ Minoris.....	$- 0.36$		η Bootis.....	
	α Ursæ Minoris S. P.....			α Ursæ Minoris.....	$- 0.36$
21	δ Orionis.....	$- 0.29$	10	α Ursæ Minoris S. P.....	$- 0.52$
	ϵ Orionis.....		11	α Ursæ Minoris S. P.....	$- 0.44$
	δ Ursæ Minoris S. P.....			η Bootis.....	
	α Ursæ Minoris S. P.....		13	α Ursæ Minoris S. P.....	$- 0.51$
22	α Ursæ Minoris.....	$- 0.38$		η Bootis.....	$- 0.40$
	δ Ursæ Minoris S. P.....		16	α Ursæ Minoris S. P.....	$- 0.23$ (a)
23	α Ursæ Minoris.....	$- 0.36$		α Bootis.....	
	δ Ursæ Minoris S. P.....		20	α Ursæ Minoris S. P.....	$- 0.26$
25	α Ursæ Minoris.....	$- 0.33$		α Virginis.....	
	α Ursæ Minoris S. P.....		21	α Ursæ Minoris S. P.....	$- 0.28$
27	α Ursæ Minoris.....	$- 0.37$		α Virginis.....	
	α Ursæ Minoris S. P.....		22	α Ursæ Minoris S. P.....	$- 0.28$
29	μ Geminorum.....	$- 0.39$	23	α Ursæ Minoris S. P.....	$- 0.38$
	δ Ursæ Minoris S. P.....			η Bootis.....	
	α Hydræ.....		24	α Ursæ Minoris S. P.....	$- 0.26$
	α Ursæ Minoris S. P.....			η Bootis.....	$- 0.24$
30	α Ursæ Minoris.....	$- 0.43$	25	12 Canum Venat.....	$- 0.21$
	α Ursæ Minoris S. P.....			α Ursæ Minoris S. P.....	
April 7	α Ursæ Minoris.....	$- 0.47$	28	12 Canum Venat.....	$- 0.28$
	α Ursæ Minoris S. P.....			α Ursæ Minoris S. P.....	
8	μ Geminorum.....	$- 0.41$	29	δ Leonis.....	$- 0.29$
	δ Ursæ Minoris S. P.....			α Ursæ Minoris S. P.....	
	α Ursæ Minoris.....	$- 0.39$	30	α Ursæ Minoris S. P.....	$- 0.32$
10	α Ursæ Minoris S. P.....	$- 0.46$		α Coronæ borealis.....	
11	α Ursæ Minoris.....	$- 0.46$	31	α Ursæ Minoris.....	$- 0.34$
	δ Ursæ Minoris S. P.....			α Ursæ Minoris S. P.....	
12	α Ursæ Minoris.....	$- 0.47$ (a)		12 Canum Venat.....	$- 0.25$
	α Ursæ Minoris S. P.....			α Ursæ Minoris S. P.....	
13	β Leonis.....	$- 0.40$	June 1	δ Leonis.....	$- 0.29$
	α Ursæ Minoris.....	$- 0.41$		α Ursæ Minoris S. P.....	
	α Ursæ Minoris S. P.....		3	α Ursæ Minoris S. P.....	$- 0.32$
17	α Ursæ Minoris.....	$- 0.40$		α Coronæ borealis.....	
	α Ursæ Minoris S. P.....		4	α Ursæ Minoris.....	$- 0.34$
18	α Ursæ Minoris.....	$- 0.41$	5	α Ursæ Minoris S. P.....	
	α Ursæ Minoris S. P.....		7	12 Canum Venat.....	$- 0.25$
19	α Ursæ Minoris S. P.....			α Ursæ Minoris S. P.....	

(a) Instrument reversed.

Date.	OBJECTS.	$n =$	Date.	OBJECTS.	$n =$
1839, June 8	12 Canum Venat.	- 0.27	1839, August 7	δ Ursæ Minoris	- 0.25
11	α Ursæ Minoris S.P.	- 0.26	8	β Lyræ	- 0.27
13	β Geminorum	- 0.21	9	α Ursæ Minoris S.P.	- 0.27
14	α Ursæ Minoris S.P.	- 0.23	12	δ Ursæ Minoris	- 0.27
15	α Bootis	- 0.24	13	12 Canum Venat.	- 0.29
17	12 Canum Venat.	- 0.30	19	α Ursæ Minoris S.P.	- 0.13
19	α Ursæ Minoris S.P.	- 0.16	20	δ Ursæ Minoris	- 0.29
20	12 Canum Venat.	- 0.24	21	β Lyræ	- 0.32
28	α Ursæ Minoris S.P.	- 0.19	22	δ Ursæ Minoris	- 0.21
29	α Ursæ Minoris S.P.	- 0.28	24	α Lyræ	- 0.33
July 2	12 Canum Venat.	- 0.27	26	α Ophiuchi	- 0.32
3	α Ursæ Minoris S.P.	- 0.46	29	δ Ursæ Minoris	- 0.30
4	12 Canum Venat.	- 0.29	30	α Ursæ Minoris S.P.	- 0.32
5	α Ursæ Minoris S.P.	- 0.28	31	δ Ursæ Minoris	- 0.32
8	α Ursæ Minoris	- 0.27		β Lyræ	- 0.30
9	δ Ursæ Minoris	- 0.31	Sept. 1	δ Ursæ Minoris S.P.	- 0.27
12	α Lyræ	- 0.28	2	δ Ursæ Minoris	- 0.29
15	α Scorpæ	- 0.31	3	δ Ursæ Minoris S.P.	- 0.28
16	δ Ursæ Minoris	- 0.33	4	α Canis Minoris	- 0.30
17	β Libræ	- 0.42	6	12 Canum Venat.	- 0.34
20	δ Ursæ Minoris	- 0.36	10	α Ursæ Minoris S.P.	- 0.35
22	α Lyræ	- 0.21	11	α Ursæ Minoris S.P.	- 0.26
24	α Ursæ Minoris S.P.	- 0.30	12	α Coronæ borealis	- 0.30
25	δ Ursæ Minoris	- 0.28	16	δ Ursæ Minoris	- 0.34 (a)
26	α Ursæ Minoris S.P.	- 0.22	17	ζ Aquilæ	- 0.31
27	12 Canum Venat.	- 0.25	18	δ Ursæ Minoris	- 0.36
29	α Ursæ Minoris S.P.	- 0.29	21	β Lyræ	- 0.32
30	δ Ursæ Minoris	- 0.20	23	α Ursæ Minoris S.P.	- 0.34
August 2	δ Ursæ Minoris	- 0.30	24	α Ursæ Minoris	- 0.34
	α Lyræ	- 0.30		α Aquarii	- 0.34

(a) Instrument reversed.

Date.	OBJECTS.	$n =$	Date.	OBJECTS.	$n =$
1839, Sept. 25	α Ursæ Minoris S. P.	$- 0.34$	1839, Nov. 6	α Ursæ Minoris S. P.	$- 0.40$
	δ Ursæ Minoris		7	α Lyrae	
26	α Ursæ Minoris S. P.	$- 0.35$	9	α Andromedæ	$- 0.41$
	δ Ursæ Minoris			α Ursæ Minoris	
28	ϵ Pegasi	$- 0.32$	10	δ Ursæ Minoris	$- 0.39$
	α Ursæ Minoris			β Lyrae	
29	μ Geminorum	$- 0.33$		12 Canum Venat.	$- 0.35$
	δ Ursæ Minoris S. P.			α Ursæ Minoris S. P.	
30	α Ursæ Minoris S. P.	$- 0.30$	11	δ Ursæ Minoris	$- 0.37 (a)$
	α Lyrae			α Lyrae	
Oct. 2	α Ursæ Minoris S. P.	$- 0.37$		α Ursæ Minoris S. P.	$- 0.34$
	α Ursæ Minoris		12	α Coronæ borealis	$- 0.32$
3	Sun	$- 0.39$		12 Canum Venat.	
	α Ursæ Minoris S. P.		15	α Ursæ Minoris S. P.	$- 0.36$
4	α Aquarii	$- 0.39$		α Ursæ Minoris S. P.	$- 0.37$
	α Ursæ Minoris		16	α Ursæ Minoris	$- 0.42$
5	α Ursæ Minoris S. P.	$- 0.45$	17	α Ursæ Minoris	
	α Ursæ Minoris			θ^1 Ceti	
7	α Ursæ Minoris S. P.	$- 0.44$	19	α Ursæ Minoris	$- 0.40$
	δ Ursæ Minoris			θ^1 Ceti	
9	β Aquarii	$- 0.47$	20	δ Ursæ Minoris	
	α Ursæ Minoris			β Lyrae	$- 0.49$
10	α Ursæ Minoris S. P.	$- 0.41$		γ Aquilæ	
	δ Ursæ Minoris		21	α Ursæ Minoris	$- 0.43$
	α Ursæ Minoris S. P.	$- 0.33$		γ Ceti	
11	Sun	$- 0.40$	22	δ Ursæ Minoris	
12	β Aquilæ	$- 0.38$		β Lyrae	$- 0.39$
	α Ursæ Minoris			α Aquilæ	
13	δ Ursæ Minoris	$- 0.38$		α Ursæ Minoris	
	α Lyrae		23	γ Aquilæ	$- 0.41$
15	α Andromedæ	$- 0.38 (a)$		α Ursæ Minoris	$- 0.33$
	α Ursæ Minoris		25	θ^1 Ceti	
16	α Ursæ Minoris S. P.	$- 0.35$	26	γ Pegasi	$- 0.37$
17	α Ursæ Minoris	$- 0.35$		α Ursæ Minoris	
18	δ Ursæ Minoris	$- 0.37$	27	δ Ursæ Minoris	$- 0.39$
	β Lyrae			β Lyrae	
	α Ursæ Minoris S. P.	$- 0.34$	28	ζ Pegasi	$- 0.44$
19	α Ursæ Minoris	$- 0.39$		α Ursæ Minoris	
20	β Ceti	$- 0.39$	30	North Mark	$- 0.44$
	α Ursæ Minoris				
	α Ursæ Minoris S. P.	$- 0.37$	Dec. 7	δ Ursæ Minoris	
21	α Bootis	$- 0.31$		β Lyrae	$- 0.47$
24	α Ursæ Minoris S. P.	$- 0.40$		α Cygni	
25	δ Ursæ Minoris	$- 0.42$	12	α Ursæ Minoris	$- 0.38 (a)$
26	α Aquarii	$- 0.41$	15	α Ursæ Minoris	$- 0.37$
	α Ursæ Minoris			η Piscium	
27	α Ursæ Minoris S. P.	$- 0.49$	17	North Mark	$- 0.36$
28	δ Ursæ Minoris	$- 0.41$	18	North and South Marks...	$- 0.01 (b)$
	α Ursæ Minoris S. P.		20	β Tauri	$+ 0.02$
29	α Ursæ Minoris			δ Ursæ Minoris S. P.	$+ 0.03$
	α Ursæ Minoris S. P.		21	δ Ursæ Minoris	
30	δ Ursæ Minoris			ζ Aquilæ	
31	δ Ursæ Minoris		23	δ Ursæ Minoris	$+ 0.12$
	β Lyrae			β Lyrae	
Nov. 5	γ Pegasi	$- 0.40$			
	α Ursæ Minoris				

(a) Instrument reversed.
(b) Instrument moved in azimuth.

DEVIATION OF THE INSTRUMENT FROM THE POLE.

Date.	OBJECTS.	$n =$	Date.	OBJECTS.	$n =$
1839, Dec. 24	α Ursæ Minoris.....	+ 0.11	1839, Dec. 27	γ Pegasi	+ 0.08
	θ^1 Ceti			α Ursæ Minoris.....	
25	δ Ursæ Minoris.....	+ 0.08		α Ursæ Minoris S. P.	+ 0.01
	ζ Aquilæ		28	α Ursæ Minoris.....	
26	δ Ursæ Minoris	+ 0.09		α Ursæ Minoris S. P.	- 0.01
	β Lyrae			α Virginis	
	ζ Cygni				
	α Ursæ Minoris.....				

VALUES OF THE QUANTITIES m , n , AND c , ADOPTED IN THE REDUCTIONS.

Date.	m	n	c	m determin- ed from	Date.	m	n	c	m determin- ed from
1839, Jan. 1	+ 0.80	- 0.37	+ 0.10	b	1839, Feb. 13, 14	+ 0.67	- 0.31	+ 0.10	b
1, 2	+ 0.78	- 0.36	+ 0.10	b	14, 15	+ 0.69	- 0.31	+ 0.10	b
3	+ 0.79	- 0.36	+ 0.10	a	16	+ 0.69	- 0.26	+ 0.10	$a \& b$
4, 5	+ 0.72	- 0.37	+ 0.10	a	18	+ 0.83	- 0.37	+ 0.10	b
7	+ 0.87	- 0.38	- 0.12	$a \& b$	18, 19	+ 0.74	- 0.31	+ 0.10	b
7, 8	+ 0.90	- 0.40	- 0.12	b	20	+ 0.94	- 0.44	+ 0.10	$a \& b$
8, 9	+ 0.98	- 0.46	- 0.12	b	21 *	+ 0.99	- 0.48	+ 0.10	...
9, 10	+ 0.96	- 0.44	- 0.12	b	21, 22	+ 1.04	- 0.52	+ 0.10	b
11	+ 0.99	- 0.38	- 0.12	a	23	+ 0.95	- 0.47	+ 0.10	b
11, 12	+ 0.80	- 0.35	- 0.12	b	24 *	+ 0.92	- 0.46	+ 0.10	...
13, 14	+ 0.76	- 0.32	- 0.12	b	25	+ 0.90	- 0.44	+ 0.10	b
15	+ 0.86	- 0.38	- 0.12	a	26	+ 0.88	- 0.44	+ 0.10	b
15, 16	+ 0.87	- 0.38	- 0.12	b	27, 28	+ 0.87	- 0.43	+ 0.10	b
16, 17	+ 0.96	- 0.43	- 0.12	b	Mar. 1, 2	+ 0.82	- 0.41	+ 0.10	b
18, 19	+ 0.96	- 0.43	- 0.12	b	4	+ 0.69	- 0.33	+ 0.10	b
20	+ 0.92	- 0.39	- 0.12	b	5 *	+ 0.72	- 0.34	+ 0.10	...
21	+ 0.92	- 0.38	- 0.12	b	6	+ 0.74	- 0.35	+ 0.10	$a \& b$
22	+ 1.08	- 0.49	- 0.12	b	8, 9	+ 1.03	- 0.51	+ 0.10	b
23	+ 0.95	- 0.39	- 0.12	b	12, 13	+ 1.33	- 0.70	+ 0.10	b
24	+ 1.00	- 0.41	- 0.12	b	18	+ 0.82	- 0.32	- 0.14	b
25	+ 0.90	- 0.34	- 0.12	$a \& b$	19	+ 0.87	- 0.36	- 0.14	b
25, 26	+ 0.97	- 0.39	- 0.12	b	21	+ 0.76	- 0.29	- 0.14	b
27	+ 0.96	- 0.38	- 0.12	b	22	+ 0.88	- 0.38	- 0.14	b
28	+ 1.03	- 0.43	- 0.12	b	23	+ 0.85	- 0.36	- 0.14	b
29	+ 1.03	- 0.43	- 0.12	b	24 *	+ 0.82	- 0.34	- 0.14	...
30	+ 1.22	- 0.57	- 0.12	b	25, 26	+ 0.79	- 0.33	- 0.14	b
31	+ 1.10	- 0.49	- 0.12	b	27	+ 0.86	- 0.37	- 0.14	b
Feb. 31 }	+ 1.05	- 0.47	- 0.12	b	29	+ 0.75	- 0.39	- 0.14	a
2	+ 1.07	- 0.48	- 0.12	b	30	+ 0.95	- 0.43	- 0.14	b
4, 5	+ 0.92	- 0.39	- 0.12	b	April 4 *	+ 0.98	- 0.45	- 0.14	...
6	+ 0.92	- 0.39	- 0.12	a	7, 8	+ 1.01	- 0.47	- 0.14	b
6, 7	+ 0.76	- 0.31	- 0.12	b	9	+ 0.90	- 0.41	- 0.14	b
8	+ 0.79	- 0.34	- 0.12	$a \& b$	9, 10	+ 0.86	- 0.39	- 0.14	b
9	+ 0.79	- 0.29	+ 0.10	a	11 *	+ 0.90	- 0.42	- 0.14	...
11	+ 0.70	- 0.37	+ 0.10	$a \& b$	11, 12	+ 0.93	- 0.46	- 0.14	b
12	+ 0.65	- 0.33	+ 0.10	b	12, 13, 15	+ 0.91	- 0.46	- 0.14	b
12, 13	+ 0.67	- 0.33	+ 0.10	b	17	+ 0.75	- 0.47	+ 0.13	b
					17, 18	+ 0.64	- 0.40	+ 0.13	b

Date.	m	n	c	m determin- ed from.	Date.	m	n	c	m determin- ed from.
1839,					1839,				
April 18, 19	+ 0.66	- 0.41	+ 0.13	b	July 10	+ 0.22	- 0.30	+ 0.14	b
19, 20	+ 0.70	- 0.44	+ 0.13	b	12	+ 0.26	- 0.31	+ 0.14	b
21 *	+ 0.76	- 0.48	+ 0.13	...	13 *	+ 0.27	- 0.32	+ 0.14	...
23	+ 0.83	- 0.53	+ 0.13	b	15	+ 0.28	- 0.33	+ 0.14	$a \& b$
24	+ 0.73	- 0.47	+ 0.13	b	16	+ 0.46	- 0.42	+ 0.14	b
26	+ 0.62	- 0.41	+ 0.13	b	17	+ 0.36	- 0.36	+ 0.14	b
27	+ 0.64	- 0.43	+ 0.13	b	18 *	+ 0.24	- 0.28	+ 0.14	...
29	+ 0.85	- 0.44	+ 0.13	$a \& b$	20	+ 0.13	- 0.21	+ 0.14	b
30	+ 0.60	- 0.41	+ 0.13	b	21 *	+ 0.20	- 0.26	+ 0.14	...
May 1 *	+ 0.62	- 0.41	+ 0.13	...	22	+ 0.26	- 0.30	+ 0.14	$a \& b$
2, 3	+ 0.63	- 0.41	+ 0.13	b	24	+ 0.19	- 0.28	+ 0.14	b
6	+ 0.56	- 0.34	+ 0.13	b	25	+ 0.08	- 0.22	+ 0.14	b
6, 7	+ 0.61	- 0.36	+ 0.13	b	26	+ 0.10	- 0.25	+ 0.14	b
9	+ 0.72	- 0.41	+ 0.13	b	27, 29	+ 0.18	- 0.29	+ 0.14	b
9, 10	+ 0.66	- 0.36	+ 0.13	b	29	+ 0.33	- 0.29	- 0.15	b
11	+ 0.87	- 0.52	+ 0.13	b	29, 30	+ 0.20	- 0.20	- 0.15	b
13	+ 0.69	- 0.44	+ 0.13	b	Aug. 1 *	+ 0.25	- 0.25	- 0.15	...
14 *	+ 0.73	- 0.48	+ 0.13	...	2	+ 0.30	- 0.30	- 0.15	b
16, 17	+ 0.77	- 0.51	+ 0.13	b	2, 3, 5 *	+ 0.27	- 0.28	- 0.15	...
20	+ 0.55	- 0.40	+ 0.13	b	7	+ 0.24	- 0.25	- 0.15	b
21	+ 0.39	- 0.23	- 0.16	$a \& b$	8	+ 0.28	- 0.27	- 0.15	b
22	+ 0.42	- 0.26	- 0.16	b	9	+ 0.29	- 0.27	- 0.15	b
22, 23	+ 0.45	- 0.28	- 0.16	b	10 *	+ 0.32	- 0.28	- 0.15	...
24	+ 0.44	- 0.28	- 0.16	b	12	+ 0.35	- 0.29	- 0.15	b
25	+ 0.58	- 0.38	- 0.16	b	13	+ 0.13	- 0.13	- 0.15	b
26, 27 *	+ 0.48	- 0.32	- 0.16	...	18 *	+ 0.29	- 0.21	- 0.15	...
27, 28	+ 0.39	- 0.26	- 0.16	b	19	+ 0.45	- 0.29	- 0.15	b
29	+ 0.38	- 0.24	- 0.16	$a \& b$	20	+ 0.19	- 0.13	- 0.15	b
29, 30	+ 0.34	- 0.21	- 0.16	b	21	+ 0.43	- 0.30	- 0.15	b
31	+ 0.45	- 0.28	- 0.16	b	22	+ 0.45	- 0.32	- 0.15	b
31 }	+ 0.47	- 0.29	- 0.16	b	24	+ 0.26	- 0.21	- 0.15	b
June 1 }					26	+ 0.41	- 0.33	- 0.15	b
3	+ 0.54	- 0.32	- 0.16	b	27 *	+ 0.40	- 0.32	- 0.15	...
4 *	+ 0.54	- 0.33	- 0.16	...	29	+ 0.40	- 0.32	- 0.15	b
4, 5	+ 0.53	- 0.34	- 0.16	b	30	+ 0.40	- 0.32	- 0.15	b
6 *	+ 0.45	- 0.30	- 0.16	...	31	+ 0.38	- 0.30	- 0.15	b
7	+ 0.37	- 0.25	- 0.16	$a \& b$	Sept. 1, 2	+ 0.36	- 0.27	- 0.15	b
7, 8	+ 0.37	- 0.27	- 0.16	$a \& b$	2, 3	+ 0.39	- 0.29	- 0.15	b
10 *	+ 0.34	- 0.26	- 0.16	...	4	+ 0.37	- 0.28	- 0.15	b
10, 11	+ 0.32	- 0.26	- 0.16	$a \& b$	5 *	+ 0.38	- 0.29	- 0.15	...
12 *	+ 0.26	- 0.24	- 0.16	...	6	+ 0.40	- 0.30	- 0.15	b
12, 13	+ 0.21	- 0.21	- 0.16	b	7, 9 *	+ 0.43	- 0.32	- 0.15	...
13, 14	+ 0.23	- 0.23	- 0.16	b	10	+ 0.46	- 0.34	- 0.15	b
14, 15	+ 0.33	- 0.30	- 0.16	b	11	+ 0.50	- 0.35	- 0.15	b
16 *	+ 0.24	- 0.23	- 0.16	...	12	+ 0.37	- 0.26	- 0.15	b
16, 17	+ 0.14	- 0.16	- 0.16	$a \& b$	12, 13	+ 0.45	- 0.30	- 0.15	b
17, 18 *	+ 0.22	- 0.20	- 0.16	...	16	+ 0.42	- 0.29	- 0.15	$a \& b$
18, 19	+ 0.29	- 0.24	- 0.16	$a \& b$	17	+ 0.40	- 0.34	+ 0.11	b
20, 24	+ 0.18	- 0.19	- 0.16	b	18	+ 0.36	- 0.31	+ 0.11	b
25, 28	+ 0.26	- 0.28	+ 0.14	b	19, 20 *	+ 0.40	- 0.34	+ 0.11	...
29	+ 0.25	- 0.27	+ 0.14	b	20, 21	+ 0.44	- 0.36	+ 0.11	b
July 1 *	+ 0.41	- 0.36	+ 0.14	...	22 *	+ 0.42	- 0.34	+ 0.11	...
2	+ 0.57	- 0.46	+ 0.14	b	22, 23	+ 0.39	- 0.32	+ 0.11	b
2, 3	+ 0.32	- 0.29	+ 0.14	$a \& b$	24	+ 0.43	- 0.34	+ 0.11	b
4	+ 0.29	- 0.28	+ 0.14	$a \& b$	24, 25	+ 0.43	- 0.34	+ 0.11	b
4, 5	+ 0.28	- 0.27	+ 0.14	$a \& b$	25, 26	+ 0.45	- 0.35	+ 0.11	b
8	+ 0.24	- 0.31	+ 0.14	$a \& b$	28	+ 0.41	- 0.32	+ 0.11	b
9	+ 0.18	- 0.28	+ 0.14	b	29, 30	+ 0.39	- 0.30	+ 0.11	b

Date.	m	n	c	m determin- ed from	Date.	m	n	c	m determin- ed from
1839, Oct. 1, 2	+ 0.51	- 0.37	+ 0.11	b	1839, Nov. 12, 13	+ 0.52	- 0.32	+ 0.09	b
3	+ 0.54	- 0.39	+ 0.11	b	15	+ 0.58	- 0.36	+ 0.09	$a \& b$
4	+ 0.55	- 0.39	+ 0.11	b	15, 16	+ 0.60	- 0.37	+ 0.09	b
4, 5	+ 0.66	- 0.45	+ 0.11	b	17	+ 0.67	- 0.42	+ 0.09	b
7	+ 0.65	- 0.44	+ 0.11	b	18 *	+ 0.65	- 0.41	+ 0.09	...
8 *	+ 0.64	- 0.46	+ 0.11	...	19	+ 0.63	- 0.40	+ 0.09	$a \& b$
9	+ 0.64	- 0.47	+ 0.11	$a \& b$	20	+ 0.80	- 0.49	+ 0.09	b
9, 10	+ 0.60	- 0.41	+ 0.11	$a \& b$	21	+ 0.69	- 0.43	+ 0.09	$a \& b$
10, 11	+ 0.46	- 0.33	+ 0.11	b	22	+ 0.68	- 0.39	+ 0.09	$a \& b$
12	+ 0.56	- 0.40	+ 0.11	b	23	+ 0.72	- 0.41	+ 0.09	b
13	+ 0.54	- 0.38	+ 0.11	$a \& b$	25	+ 0.66	- 0.33	+ 0.09	$a \& b$
15	+ 0.60	- 0.38	- 0.12	$a \& b$	26	+ 0.70	- 0.37	+ 0.09	b
16, 17	+ 0.62	- 0.35	- 0.12	$a \& b$	27	+ 0.74	- 0.39	+ 0.09	b
17, 18	+ 0.61	- 0.35	- 0.12	b	28	+ 0.83	- 0.44	+ 0.09	b
18, 19	+ 0.65	- 0.37	- 0.12	b	30	+ 0.86	- 0.44	+ 0.09	$a \& b$
20	+ 0.69	- 0.34	- 0.12	$a \& b$	Dec. 2, 5, 6 *	+ 0.90	- 0.46	+ 0.09	...
20, 21	+ 0.70	- 0.39	- 0.12	b	7	+ 0.95	- 0.47	+ 0.09	b
24, 25	+ 0.66	- 0.37	- 0.12	$a \& b$	13	+ 0.90	- 0.38	- 0.12	$a \& b$
26	+ 0.64	- 0.31	- 0.12	b	14, 15	+ 0.83	- 0.37	- 0.12	b
27, 28	+ 0.77	- 0.40	- 0.12	$a \& b$	16	+ 0.79	- 0.36	- 0.12	$a \& b$
28, 29	+ 0.79	- 0.42	- 0.12	$a \& b$	17, 18	+ 0.26	- 0.01	- 0.12	$a \& b (a)$
29, 30	+ 0.79	- 0.41	- 0.12	$a \& b$	19 *	+ 0.22	0.00	- 0.12	...
Nov. 31 }	+ 0.84	- 0.49	- 0.12	$a \& b$	20	+ 0.19	+ 0.02	- 0.12	b
1 }					21	+ 0.12	+ 0.03	- 0.12	$a \& b$
5	+ 0.74	- 0.40	- 0.12	$a \& b$	22, 23	+ 0.01	+ 0.12	- 0.12	b
6, 7	+ 0.75	- 0.40	- 0.12	$a \& b$	24	+ 0.06	+ 0.11	- 0.12	$a \& b$
9	+ 0.74	- 0.41	- 0.12	b	25	+ 0.06	+ 0.08	- 0.12	$a \& b$
10	+ 0.70	- 0.39	- 0.12	$a \& b$	26	+ 0.09	+ 0.09	- 0.12	b
10, 11	+ 0.65	- 0.35	- 0.12	b	26, 27	+ 0.12	+ 0.08	- 0.12	b
11	+ 0.58	- 0.37	+ 0.09	b	27, 28	+ 0.30	+ 0.01	- 0.12	$a \& b$
11, 12	+ 0.61	- 0.34	+ 0.09	$a \& b$	28, 29, 31	+ 0.27	- 0.01	- 0.12	b
(a) Instrument moved in azimuth.									

MEAN CORRECTION AND DAILY RATE OF THE CLOCK, ADOPTED IN THE REDUCTIONS.

Date.	Time by Clock.	Correction.	Daily Rate, or r .	r'	No. of Stars.	Date.	Time by Clock.	Correction.	Daily Rate, or r .	r'	No. of Stars.
1839, Jan. 1	$h. m.$ 3 17	+ 54.82	+ 1.46	.....	6	1839, Jan. 17	$h. m.$ 23 17	+ 18.75	+ 1.74	.....	5
2	20 46	55.88	1.50	.....	5	19	21 35	22.10	1.59	.....	7
3	2 50	57.76	1.36	.....	2	20	0 3	23.85	1.66	.....	4
4	20 35	58.77	1.26	.....	1	21	21 38	25.31	1.78	.....	5
5	0 50	60.26	1.38	.....	3	22	4 42	27.64	1.62	.....	5
7	3 45	63.18	1.32	.....	5	23	3 21	29.17	1.86	.....	5
8	21 22	64.15	1.75	.....	5	24	3 47	31.06	1.57	.....	5
9	20 34	65.84	1.92	.....	6	25	21 23	32.21	1.81	.....	3
10	3 17	68.30	1.74	.....	5	26	0 11	34.23	2.12	.....	7
11	4 14	70.11	1.48	.....	5	27	6 59	36.95	1.91	.....	5
12	21 5	71.15	1.42	.....	3	28	5 7	38.71	1.83	.....	5
14	1 3	74.22	1.32	.....	7	29	4 33	40.50	1.82	.....	5
15	22 17 (a)	15.39	1.50	.....	6	30	7 7	42.51	2.22	.....	6
16	21 45	16.86	1.78	.....	5	31	3 47	44.42	2.22	.....	5
(a) Clock put forward one minute.											

Date.	Time by Clock.	Correction.	Daily Rate, or r .	r'	No. of Stars.	Date.	Time by Clock.	Correction.	Daily Rate, or r .	r'	No. of Stars.
1839, Feb. 1	<i>h. m.</i> 0 36	<i>s.</i> + 46.35	<i>s.</i> + 2.17	.....	4	1839, Apr. 21	<i>h. m.</i> 9 39	<i>s.</i> + 6.02	<i>s.</i> .....	.....	3
2	1 58	48.64	2.16	.....	4	23	5 59 (<i>d</i>)	+ 0.62	+ 0.93	.....	5
4	6 6	53.34	2.02	.....	6	24	4 46	1.50	.....	.....	2
5	4 33	55.23	2.10	.....	5		7 30 (<i>d</i>)	1.52	- 0.10	.....	3
6	6 40	57.51	2.19	.....	3	26	11 47	1.29	+ 0.21	.....	5
	20 54	58.81	1.92	.....	5	27	12 2	1.50	0.02	.....	4
8	1 57	61.13	1.65	.....	1	29	12 26	1.55	0.34	.....	4
9	18 36	63.93	1.88	.....	2	30	13 50	1.91	0.19	.....	4
11	5 29	66.67	2.02	.....	5						
12	2 37	68.45	1.87	.....	5	May 1	11 24	2.08	0.41	.....	2
13	0 1	70.12	1.58	.....	2	2	9 44	2.46	0.12	.....	5
14	0 43	71.75	1.75	.....	7	3	9 37	2.58	0.13	.....	1
15	22 56	73.37	1.42	.....	1	6	12 12	2.99	0.37	.....	5
16	5 54 (<i>a</i>)	15.21	1.86	.....	5	7	6 20	3.27	0.25	.....	5
18	0 43	18.52	2.02	.....	5	9	11 33	3.83	0.43	.....	5
20	5 45	22.98	2.36	.....	4	10	6 27	4.17	0.02	.....	5
21	8 6	25.57	2.13	.....	2	11	12 22	4.20	0.38	.....	5
22	3 49	27.32	2.30	.....	6	13	12 2	4.95	+ 0.07	.....	5
23	3 9	29.56	1.99	.....	6	14	11 43	5.02	- 0.19	.....	5
24	7 39	31.92	2.22	.....	5	16	13 16	4.63	+ 0.23	.....	5
25	3 31	33.76	2.16	.....	5	20	11 53	5.53	0.91	.....	5
26	7 15	36.25	2.12	.....	5	21	14 45	6.55	0.10	.....	4
27	3 54	38.07	1.99	.....	6	22	14 6	6.65	0.13	.....	5
28	10 59	40.65	2.53	.....	4	23	12 48	6.77	0.14	.....	5
						24	12 48	6.91	0.10	.....	5
Mar. 1	4 26	42.49	.....	.....	1	25	10 54	7.00	0.22	.....	7
	12 11	42.57	2.32	.....	6	27	9 42	7.43	0.12	.....	6
2	4 27	44.14	2.05	.....	6	28	10 20	7.55	0.08	.....	5
4	0 58	47.94	1.88	.....	2	29	9 1	7.63	0.32	.....	5
5	8 5	50.38	2.21	.....	5	30	8 49	7.95	0.11	.....	5
6	5 42	52.37	2.07	.....	5	31	11 52	8.07	0.37	.....	5
8	7 26	56.66	2.41	.....	2						
9	5 58	58.92	2.13	.....	5	June 1	7 24	8.37	0.21	.....	5
12	7 1 (<i>a</i>)	5.41	2.16	.....	5	3	8 17	8.79	0.08	.....	5
18	8 33	18.50	1.84	.....	5	4	4 11	8.94	0.31	.....	10
19	6 24	20.18	2.02	.....	2	6	14 8	9.38	0.13	.....	1
21	5 15	24.12	1.83	.....	5	7	12 57	9.50	0.09	.....	4
22	5 21	25.96	1.84	.....	6	8	10 8	9.58	+ 0.38	.....	5
23	5 23	27.80	1.64	.....	5	10	15 14	10.41	- 0.13	.....	3
24	8 24	29.64	1.81	.....	2	11	6 20	10.33	+ 0.54	.....	2
25	5 51	31.26	1.85	.....	5	12	15 0	11.07	0.57	.....	5
27	8 28	35.16	1.83	.....	4	13	11 43	11.56	0.42	.....	5
29	7 51	38.77	1.62	.....	5	14	11 10	11.97	0.35	.....	5
30	8 36	40.44	2.04	.....	6	15	12 4	12.33	0.53	.....	5
						16	10 14	12.82	0.46	.....	3
April 4	8 32	50.62	2.04	.....	3	17	8 36	13.25	0.18	.....	7
8	2 15	58.36	2.34	.....	9	19	11 20	13.62	0.01	.....	5
9	7 0	61.17	2.49	.....	5	20	14 16	13.63	0.12	.....	5
10	4 34	63.41	2.17	.....	5	24	7 35	14.06	0.34	.....	1
11	6 49 (<i>a</i>)	5.78	2.26	.....	5	28	15 3	15.50	0.55	.....	2
12	4 56	+ 7.86	.....	.....	3	29	12 35	15.99	0.36	.....	5
13	9 3 (<i>b</i>)	- 0.50	- 3.64	.....	5						
15	7 30	- 7.54	.....	.....	3	July 1	16 34	16.77	0.13	.....	4
17	8 58 (<i>c</i>)	- 4.50	+ 2.88	.....	6	2	17 47	16.91	1.07	.....	3
18	6 42	- 1.89	2.66	.....	6	3	10 49	17.65	0.36	.....	7
19	8 32	+ 0.95	.....	.....	5	4	13 14	18.04	0.07	.....	5
20	7 33 (<i>d</i>)	+ 3.55	+ 2.27	.....	5	8	14 29	18.33	0.04	.....	6

(a) Clock put forward one minute.
 (b) Transit Clock taken away to be cleaned.
 Observations made with Circle Clock.

(c) Transit Clock replaced.
 (d) Pendulum adjusted to alter rate.

Date.	Time by Clock.	Correction.	Daily Rate, or r .	r'	No. of Stars.	Date.	Time by Clock.	Correction.	Daily Rate, or r .	r'	No. of Stars.
1839, July 9	h. m.	s.	s.	s.		1839, Sept. 21	h. m.	s.	s.	s.	
10	18 8	+18.84†	+ 0.24	.....	4	22	17 34	+37.76	+ 0.37	+ 0.12	5
12	11 23	19.01†	0.14	.....	2	23	23 38	38.03	0.25	+ 0.03	4
13	14 42	19.32†	0.32	.....	3	24	17 34	38.23	0.26	- 0.01	5
15	12 48	19.62†	0.21	.....	2	25	23 20	38.53	0.68	+ 0.35	3
16	13 14	20.04†	0.15	.....	5	26	16 34	39.20	0.79	- 0.20	5
17	18 14	20.22†	0.07	.....	3	28	17 34	39.81	0.40	- 0.18	5
18	19 8	19.87	0.20	.....	6	29	20 16	39.86	+ 0.15	+ 0.06	5
20	18 49	20.07	0.33	.....	5	30	7 5	40.21	- 0.20	+ 0.31	6
21	15 53	20.69	.....	.....	5		19 34	40.02	- 0.18	+ 0.36	5
22	16 8 (a)	+20.86	- 0.10	.....	2	Oct. 2	17 22	40.98	+ 0.56	+ 0.03	5
24	14 8	20.77	+ 0.01	.....	1	4	19 54	42.31	0.60	- 0.01	5
25	15 38	20.79	- 0.28	.....	5	5	17 0	42.83	0.66	+ 0.08	5
26	18 44	20.47	+ 0.66	.....	2	7	19 57	44.56	0.72	- 0.05	5
27	12 48	20.97	0.01	.....	1	8	21 33	45.27	0.80	+ 0.12	5
29	15 35	20.98	0.10	.....	5	9	19 53	46.12	0.80	- 0.13	5
30	15 47	21.18	0.26	.....	3	10	20 27	46.80	0.71	+ 0.04	5
	12 41	21.41	+ 0.23	.....	6	12	19 28	48.37	0.71	- 0.04	5
Aug. 1	19 24	21.94	- 0.10	.....	4	13	17 57	49.00	0.71	+ 0.04	4
2	18 52	21.84	+ 0.60	.....	4	15	22 59	50.76	0.75	- 0.03	5
3	3 38	22.06	0.34	.....	1	17	19 17	52.00	0.76	+ 0.04	5
5	4 45	22.41	+ 0.35	.....	2	18	17 36	52.73	0.90	+ 0.12	5
7	16 45	22.94	- 0.10	.....	5	19	15 32	53.65	0.98	- 0.03	5
8	16 47	22.75	+ 0.17	.....	5	20	23 45	54.90	0.73	- 0.15	4
9	14 52	22.91	0.36	.....	5	21	17 7	55.35	0.67	+ 0.07	3
12	16 38	23.30	0.38	.....	5	25	17 40	59.15	1.20	+ 0.06	2
13	18 55	24.48	0.75	.....	5	26	21 22	60.61	1.11	- 0.13	3
18	19 17	25.23	0.47	.....	5	28	17 52 (b)	2.21	0.85	- 0.01	3
19	18 7	27.55	0.36	.....	3	29	19 38	3.11	0.84	0.00	6
20	19 15	27.93	0.79	.....	5	30	18 44	3.92	0.92	+ 0.08	1
21	18 50	28.71	0.32	.....	6	31	18 44	5.19†	.....	.....	1
22	17 24	29.01	0.50	.....	5		23 33	5.14	0.67	- 0.29	3
22	18 31	29.53	0.56	.....	1	Nov. 1	18 44	5.49	0.50	+ 0.08	1
24	18 48	30.66	0.28	.....	5	5	22 26	8.93	0.61	- 0.05	5
26	16 19	31.18	0.42	.....	5	7	19 48	9.88	0.55	+ 0.02	2
27	17 5	31.61	0.54	.....	5	9	0 0	11.18	0.40	- 0.09	1
29	19 6	32.73	0.48	.....	5	10	18 51	11.44	0.29	- 0.06	2
30	15 50	33.14	0.43	.....	3	11	20 17	11.68	0.26	+ 0.04	6
31	19 16	33.63	+ 0.25	- 0.15	5	12	17 23	11.94	0.39	+ 0.11	3
Sept. 1	5 15	33.68	- 0.36	- 0.28	5	13	21 33	12.54	0.54	+ 0.03	6
2	18 19	33.40	0.73	- 0.39	5	16	18 25	14.33	0.44	- 0.06	6
3	14 56	32.49	1.24	- 0.21	7	17	0 29	14.78	0.65	+ 0.23	4
4	17 13	30.87	- 0.93	+ 0.50	5	18	0 2	15.64	0.67	- 0.21	2
5	19 16	30.45	+ 0.08	+ 0.43	5	19	0 17	16.11	0.57	+ 0.10	5
6	15 27	30.82	0.40	- 0.05	1	20	18 23	16.60	0.59	- 0.07	5
7	17 54	31.20	0.43	+ 0.08	5	21	1 59	17.26	0.66	+ 0.12	6
9	21 32	32.47	0.68	+ 0.04	4	22	18 54	17.79	0.68	- 0.10	5
10	18 14	33.09	0.72	- 0.01	5	23	18 20	18.36	0.55	- 0.04	5
11	19 16	33.83	0.69	- 0.02	5	25	1 45	19.42	0.48	+ 0.01	5
12	20 52	34.54	0.48	- 0.18	3	26	0 20	19.87	0.48	0.00	6
13	17 14	34.82	0.34	+ 0.02	6	27	18 54	20.24	0.29	- 0.24	5
16	19 36	36.02	0.17	- 0.07	5	28	21 43	20.26	0.18	+ 0.15	5
17	17 53	36.12	0.35	+ 0.26	5	30	0 51	21.77†	0.55	+ 0.02	3
18	17 45	36.72	0.43	- 0.17	5	Dec. 2	20 36	22.83†	0.56	- 0.01	1
19	19 28	36.99	0.29	+ 0.01	5	5	18 44	24.33†	0.47	- 0.01	2
20	19 54	37.33	0.41	+ 0.08	5						

(a) Pendulum adjusted to alter rate.

(b) Clock put forward one minute.

Date.	Time by Clock.	Correction.	Daily Rate, or r .	r'	No. of Stars.	Date.	Time by Clock.	Correction.	Daily Rate, or r .	r'	No. of Stars.
1839, Dec. 6	$h. m.$ 19 29	$s.$ +24.38	$s.$ +0.49	$s.$ + 0.04	5	1839, Dec. 23	$h. m.$ 19 50	$s.$ +32.74	$s.$ +0.36	$s.$ - 0.05	6
7	19 6	24.90	0.53	0.00	5	24	0 33	33.10	0.23	- 0.06	5
13	22 56	28.05	0.36	- 0.02	1	25	19 44	33.25	0.28	+ 0.11	5
14	18 31	28.33	0.41	+ 0.08	1	26	19 57	33.64	0.47	+ 0.08	5
16	3 24	29.78	0.60	0.00	5	27	23 1	34.28	0.31	- 0.23	5
17	0 0	30.29	0.50	- 0.11	1	28	19 57	34.38	0.47	+ 0.41	5
18	5 15	30.75	0.40	+ 0.02	5		14 10	34.97	0.76	- 0.03	4
20	4 58	31.60	0.41	- 0.01	4	29	13 57	35.70	0.62	- 0.12	2
21	0 6	31.92	0.42	+ 0.02	6	31	3 28	36.36	.....	.....	5

MEAN RIGHT ASCENSIONS OF THE STARS OBSERVED IN THE YEAR 1839, REDUCED TO
JANUARY 1, 1839.

α Andromedæ.				γ Pegasi.				λ Cassiopeæ.				65 Piscium preceding.				36 Andromedæ.			
Jan. 19	$h. m. s.$ 0 0 4.77			Feb. 14	$h. m. s.$ 0 4 57.00			Jan. 2	$h. m. s.$ 0 22 55.55			Jan. 16	$h. m. s.$ 0 41 14.81			Jan. 17	$h. m. s.$ 0 46 21.44		
20	4.67			18	57.14							17	14.94			19	21.35		
Feb. 12	4.57			23	57.07			55 Piscium.				19	15.00			γ Cassiopeæ.			
13	4.63			27	57.06							65 Piscium following.				Jan. 24	0 47 2.62		
14	4.62			June 4	57.04			Jan. - 2	0 31 27.71			Jan. 16	0 41 15.34			26	2.67		
18	4.81			Sept. 22	57.09			β Ceti.				17	15.32			67 Piscium.			
23	4.74			24	57.13							19	15.37			Jan. 15	0 47 19.52		
27	4.44			Oct. 29	56.99			Jan. 14	0 35 30.08			φ^2 Ceti.				16	19.47		
Mar. 2	4.51			31	56.95			15	29.92			Jan. 7	0 42 3.53			A. S. C. 91 S. P.			
4	4.68			Nov. 5	57.36			17	30.23			12	3.31			Mar. 18	0 47 56.39		
19	4.78			17	57.07			20	30.35			14	3.47			21	56.49		
June 4	4.72			18	57.11			Oct. 20	30.52			Groombridge 144 S. P.				25	56.23		
Sept. 22	4.65			19	57.13			Nov. 17	30.40			Mar. 21	0 42 29.33			27	56.61		
24	4.52			26	57.12			19	30.17			25	29.99			April 8	55.63		
Oct. 15	4.66			Dec. 24	57.11			η Cassiopeæ.				April 8	28.08			φ^3 Ceti.			
20	4.66			27	57.14			Jan. 2	0 39 24.17			17	29.58			Jan. 2	0 47 57.07		
29	4.59			41 Piscium.				δ Piscium.				18	26.28			3	56.96		
31	4.69			Sept. 22	0 12 19.06							66 Piscium.				7	56.71		
Nov. 5	4.74			Nov. 16	19.19			Jan. 20	0 40 20.04			Jan. 2	0 46 4.40			Groombridge 195 S. P.			
11	4.85			17	18.97			Aug. 26	20.05			7	4.26			May 16	0 50 41.83		
13	4.89			10 Ceti.				Oct. 20	20.00			9	3.97			22	44.10		
17	4.59			Oct. 19	0 18 21.94			64 Piscium.				36 Andromedæ.				23	44.45		
18	4.66			12 Ceti.				Jan. 7	0 40 31.44			Jan. 12	0 46 21.43			24	43.31		
19	4.75			Oct. 19	0 21 49.17			12	31.16			14	21.56			25	43.65		
25	4.76			γ Pegasi.				α Andromedæ.				65 Piscium preceding.				36 Andromedæ.			
26	4.67			Jan. 20	0 4 57.05			Jan. 16	0 41 14.81			Jan. 16	0 41 14.81			Jan. 17	0 46 21.44		
Dec. 24	4.56			Feb. 12	57.00			17	14.94			17	14.94			19	21.35		
27	4.61			13	57.16			19	15.00			19	15.00						

ε Piscium.			α Ursæ Minoris.			α Ursæ Minoris S.P.			τ Piscium.			A. S. C. 179.		
Jan. 20	<i>h. m. s.</i>	0 54 35.42	Jan. 1	<i>h. m. s.</i>	1 1 54.62	Jan. 7	<i>h. m. s.</i>	1 1 55.00	Jan. 7	<i>h. m. s.</i>	1 2 48.57	Jan. 11	<i>h. m. s.</i>	1 29 34.96
21		35.58	2		54.41	Mar. 18		55.11	9		48.50	12		34.84
Sept. 23		35.53	7		54.86	19		55.03	12		48.47	16		34.72
Nov. 17		35.45	9		54.04	21		54.90	χ Piscium.			ο Piscium.		
			11		55.41	25		55.27	Jan. 1	<i>h. m. s.</i>	1 2 48.62	Jan. 21	<i>h. m. s.</i>	1 36 53.88
25 Ceti.			12		54.34	27		55.57	2		48.64	22		54.26
Jan. 2	<i>h. m. s.</i>	0 54 54.09	14		55.07	29		54.26	δ Cassiopeæ.			Feb. 18		53.98
4		54.06	15		54.41	30		53.16	Jan. 9	<i>h. m. s.</i>	1 15 20.37	Jan. 24	<i>h. m. s.</i>	1 42 53.06
7		53.95	16		53.94	April 8		51.48	11		20.59	31		53.19
			17		53.56	10		56.94	44 Ceti.			Feb. 1		53.19
27 Ceti.			19		53.28	13		55.87	Jan. 2	<i>h. m. s.</i>	1 15 56.78	ζ Ceti.		
Jan. 2	<i>h. m. s.</i>	0 57 33.10	21		54.87	18		54.96	θ ¹ Ceti.			Jan. 1	<i>h. m. s.</i>	1 43 30.90
			22		56.11	19		54.45	Jan. 1	<i>h. m. s.</i>	1 15 58.58	11		30.96
28 Ceti.			28		55.16	20		53.55	3		58.47	12		30.65
Jan. 3	<i>h. m. s.</i>	0 58 0.74	Feb. 1		54.42	May 7		54.34	17		58.34	α Trianguli.		
4		0.52	6		53.68	10		51.53	31		58.64	Jan. 9	<i>h. m. s.</i>	1 43 55.10
7		0.35	12		53.86	June 5		54.19	Nov. 17		58.60	17		55.01
16		0.31	13		54.15	July 8		57.78	19		58.53	19		55.22
30 Ceti.			14		53.92	24		57.89	25		58.63	γ Arietis.		
Jan. 1	<i>h. m. s.</i>	0 59 40.43	15		54.70	25		54.69	Dec. 24		58.70	Jan. 21	<i>h. m. s.</i>	1 44 42.40
2		40.53	23		53.06	27		56.39	46 Ceti.			β Arietis.		
η Ceti.			25		53.78	30		52.88	Jan. 14	<i>h. m. s.</i>	1 17 42.06	Nov. 19	<i>h. m. s.</i>	1 45 45.70
Jan. 4	<i>h. m. s.</i>	1 0 29.48	27		53.44	Aug. 8		53.50	15		42.08	7 Arietis.		
7		29.38	Mar. 2		52.61	26		55.27	16		41.84	Jan. 1	<i>h. m. s.</i>	1 46 53.12
11		29.58	9		52.43	30		54.59	47 Ceti.			9		53.09
β Andromedæ.			19		55.10	Sept. 3		53.71	Jan. 17	<i>h. m. s.</i>	1 18 54.64	A. S. C. 226.		
Jan. 3	<i>h. m. s.</i>	1 0 44.29	22		54.62	4		54.60	31		54.96	Jan. 9	<i>h. m. s.</i>	1 57 35.86
12		44.06	23		55.38	10		54.60	η Piscium.			17		35.69
19		44.13	25		55.01	16		54.81	Sept. 23	<i>h. m. s.</i>	1 22 52.64	19		35.90
ψ ³ Piscium.			27		55.31	18		54.92	Dec. 15		52.62	α Arietis.		
Jan. 1	<i>h. m. s.</i>	1 1 13.23	30		52.97	23		53.96	50 Ceti.			Jan. 1	<i>h. m. s.</i>	1 58 6.61
2		13.36	April 7		51.32	25		54.60	Jan. 9	<i>h. m. s.</i>	1 28 7.79	11		6.74
θ Cassiopeæ.			9		57.16	26		54.70	11		7.90			
Jan. 24	<i>h. m. s.</i>	1 1 20.74	11		55.67	30		54.88	12		7.71			
31		20.67	12		54.67	Oct. 2		55.15						
Mar. 2		20.46	17		55.12	5		55.25						
			18		54.76	7		54.86						
			19		53.65	10		54.25						
			May 6		54.36	16		54.81						
			9		51.79	18		54.68						
			June 4		54.37	24		54.58						
			Sept. 23		55.01	27		55.13						
			Oct. 2		55.05	28		55.36						
			5		55.19	29		54.90						
			17		54.89	Nov. 15		55.57						
			19		54.80	Dec. 27		54.37						
			29		55.09	32 Ceti.								
			Nov. 16		55.31	Jan. 4	<i>h. m. s.</i>	1 2 7.51						
			20		56.62	16		7.45						
			22		54.48	17		7.34						
			Dec. 7		55.15									
			26		54.37									
			28		54.27									

α Arietis.			69 Ceti.			γ Ceti.			α Ceti.			α^2 Ceti.		
Jan. 24	<i>h. m. s.</i> 1 58	6.74	Feb. 5	<i>h. m. s.</i> 2 13	42.06	Nov. 21	<i>h. m. s.</i> 2 34	57.84	Feb. 12	<i>h. m. s.</i> 2 53	52.26	Jan. 1	<i>h. m. s.</i> 3 12	41.90
29		6.67				25		57.89	Nov. 13		52.17	2		41.94
31		6.55				26		57.80	21		52.09	7		41.79
Feb. 1		6.70	70 Ceti.			Dec. 31		57.87	25		52.05	Groombridge 642.		
5		6.85	Jan. 31	2 14	0.48	39 Arietis.			26		52.17			
18		6.65	71 Ceti.			Jan. 2	2 38	20.38	Dec. 31		52.16	Jan. 2	3 14	36.78
23		6.52				A. S. C. 299.			ϵ^2 Eridani.			7		35.98
25		6.54	Jan. 7	2 16	50.40	Jan. 7	2 39	0.02	Jan. 12	2 54	48.32	12		35.41
27		6.64	31		50.38	28		0.08	14		48.29	Groombridge 642 S. P.		
Mar. 2		6.54	Feb. 5		50.55	ϵ Persei.			15		48.35	May 13	3 14	34.99
4		6.66	σ Ceti.			Jan. 2	2 42	53.19	ϵ^3 Eridani.			14		36.15
9		6.50	Jan. 28	2 24	27.52	A. S. C. 315.			Jan. 1	2 56	22.30	16		35.27
22		6.72	31		27.39	Dec. 24	2 47	37.60	2		22.46	22		39.39
25		6.82	Feb. 5		27.61	δ Arietis.			11		22.44	24		38.74
April 8		6.62	77 Ceti.			Nov. 19	2 50	1.07	Feb. 19	3 2	25.82	A. S. C. 371.		
10		6.70	Jan. 28	2 26	46.22	λ Ceti.			Nov. 19		26.03	Jan. 1	3 16	5.21
12		6.51	ν Arietis.			Dec. 24	2 51	5.66	ζ Eridani.			10		4.71
Nov. 13		6.73	Feb. 18	2 29	41.16	Nov. 19	2 50	1.07	Jan. 1	3 8	0.96	14		5.24
25		6.58	33 Arietis.			ϵ Eridani.			δ Arietis.			Jan. 11	3 17	6.63
26		6.75	Jan. 2	2 31	17.39	Jan. 28	2 51	33.80	Feb. 19	3 2	25.82	15		6.63
30		6.61	28		17.42	γ Persei.			Nov. 19		26.03	σ Persei.		
Dec. 24		6.71	Feb. 8		17.59	Jan. 2	2 53	10.89	95 Ceti.			Jan. 1	3 19	15.31
β Trianguli.			ϵ Ceti.			ϵ^1 Eridani.			Jan. 1	3 10	8.46	14		15.19
Jan. 1	1 59	58.95	Jan. 31	2 31	46.75	Jan. 14	2 53	15.29	2		8.47	16		15.03
9		59.04	Feb. 5		46.74	28		15.25	7		8.42	17 Eridani.		
11		59.09	84 Ceti.			Feb. 5		15.14	A. S. C. 359.			Jan. 1	3 22	37.99
γ Trianguli.			Jan. 28	2 32	59.37	α Ceti.			Jan. 10	3 10	36.57	2		38.03
Jan. 1	2 3	2.84	35 Arietis.			Jan. 1	2 53	52.20	11		36.77	\downarrow Persei.		
63 Ceti.			Jan. 2	2 34	1.17	7		52.10	14		36.80	Jan. 1	3 25	4.65
Jan. 17	2 3	25.34	γ Ceti.			α^1 Ceti.			ϵ Eridani.			10		4.28
Feb. 1		25.56	Jan. 7	2 34	57.84	Jan. 15	3 10	55.35	Jan. 2	3 25	20.99	11		4.67
θ^1 Arietis.			Feb. 18		57.75	16		55.22	7		20.86			
Nov. 19	2 9	11.17												
9 Persei.														
Feb. 1	2 11	10.70												
5		11.19												
σ Ceti.														
Jan. 17	2 11	12.89												
31		12.92												

10 Tauri.			29 Tauri.			ζ Persei.			35 Eridani.			A. S. C. 467.		
Jan. 10	<i>h. m. s.</i>	3 28 39.55	Jan. 8	<i>h. m. s.</i>	3 37 7.31	Jan. 17	<i>h. m. s.</i>	3 44 1.22	Jan. 7	<i>h. m. s.</i>	3 53 22.78	Feb. 23	<i>h. m. s.</i>	4 6 9.50
11		39.74	19		7.42	19		1.45	11		22.81	25		9.61
			21		7.47				17		22.55	27		9.74
20 Eridani.			* Pleiadum D + 23° 14'.			30 Eridani.			ν Tauri.			39 Eridani.		
Jan. 1		3 28 57.50	Jan. 1		3 37 45.67	Jan. 21		3 44 44.60	Jan. 1		3 54 35.97	Jan. 8		4 6 44.08
7		57.50	2		45.68	22		44.74	2		35.79	11		44.28
			7		45.58							14		44.27
21 Eridani.			η Tauri.			32 Eridani.			37 Tauri.			μ Tauri.		
Jan. 1		3 31 4.44	Jan. 14		3 37 55.48	Jan. 1		3 46 12.65	Jan. 24		3 55 11.11	Jan. 22		4 6 47.89
2		4.52	22		55.47	2		12.60	Aug. 2		11.20	Feb. 1		47.76
7		4.48	24		55.49	7		12.59	Nov. 21		11.04	22		47.65
12 Tauri.			Mar. 22		55.65	ε Persei.			37 Eridani.			40 Eridani.		
Jan. 16		3 31 28.05	23		55.57	Jan. 8		3 47 4.01	Jan. 7		4 2 31.46	Jan. 21		4 7 51.63
21		28.18	April 10		55.49	19		4.05	8		31.35	28		51.91
Feb. 12		28.45	Nov. 21		55.32	24		4.06	11		31.47	Feb. 18		51.86
			30		55.58	Groombridge 750.			45 Tauri.			66 Tauri.		
			Dec. 31		55.52	Jan. 15		3 48 2.75	Jan. 21		4 2 46.27	Jan. 7		4 15 5.51
δ Persei.			π Eridani.			16		2.61	28		46.33	8		5.39
Jan. 15		3 31 29.27	Jan. 16		3 38 31.87	Groombridge 750 S. P.			μ Persei.			10		5.31
Feb. 22		29.23	19		32.21	May 13		3 48 2.26	Feb. 25		4 3 5.88	ξ Eridani.		
23		29.35	Feb. 12		32.19	14		2.76	27		5.94	Jan. 21		4 15 39.95
22 Eridani.			A. S. C. 416.			16		2.03	ο Eridani.			22		40.06
Jan. 7		3 32 40.35	Feb. 22		3 38 49.40	22		5.47	Feb. 18		4 4 0.70	28		40.11
8		40.21	23		49.48	24		5.10	22		0.49	ν ¹ Tauri.		
14		40.23			49.45	ξ Persei.			23		0.41	Nov. 21		4 16 40.89
A. S. C. 400.			26 Tauri (Pleiadum).			Jan. 21		3 48 31.95	46 Tauri.			44 Eridani.		
Jan. 1		3 34 14.28	Jan. 1		3 39 23.68	22		32.17	Jan. 8		4 4 53.20	Jan. 7		4 20 13.05
2		14.28	2		23.61	Feb. 23		31.94	10		53.03	8		13.05
16		14.10	7		23.61	γ ¹ Eridani.			11		53.33	11		13.14
δ Eridani.			Piazzi III. 165.			Jan. 1		3 50 31.27	47 Tauri.			45 Eridani.		
Jan. 7		3 35 32.34	Jan. 8		3 40 24.70	7		31.15	Jan. 21		4 5 11.23	Jan. 10		4 23 38.66
11		32.27	11		24.97	11		31.20	22		11.44	11		38.75
			15		24.82	14		31.14	Feb. 1		11.22	14		38.66
						24		31.18						
A. S. C. 407.			31 Tauri.			Feb. 23		31.19						
Jan. 14		3 35 52.60	Jan. 1		3 43 25.52	25		31.13						
15		52.78	2		25.44	Dec. 31		31.15						
			7		25.43									

46 Eridani.			51 Eridani.			59 Eridani.			ω Aurigæ.			ψ Eridani.		
Jan. 16	<i>h. m. s.</i> 4 26	3.74	Jan. 14	<i>h. m. s.</i> 4 29	30.10	Jan. 19	<i>h. m. s.</i> 4 41	17.90	Jan. 11	<i>h. m. s.</i> 4 48	20.29	Jan. 19	<i>h. m. s.</i> 4 53	37.97
17		3.98	15		30.00	21		17.95	14		20.20	22		38.11
19		3.97	16		29.86	22		18.04	15		20.06	28		38.12
A. S. C. 526.			53 Eridani.			π^1 Orionis.			62 Eridani.			η Aurigæ.		
Jan. 11	4 26	24.23	Jan. 19	4 30	48.46	Jan. 8	4 41	50.43	Jan. 16	4 48	28.38	Jan. 7	4 55	14.05
14		24.18	21		48.47	10		50.50	17		28.41	8		13.95
15		24.15	22		48.60	11		50.59	19		28.52	11		14.17
47 Eridani.			A. S. C. 542.			3 Orionis.			10 Camelopardi.			66 Eridani.		
Jan. 21	4 26	26.41	Jan. 19	4 31	55.50	Jan. 14	4 42	38.02	Jan. 22	4 49	7.46	Jan. 17	4 58	47.98
Feb. 12		26.55	21		55.52	15		38.00	28		7.40	19		48.07
18		26.68	22		55.65	16		37.95	Feb. 4		7.56	21		48.17
α Tauri.			τ Tauri.			60 Eridani.			10 Orionis.			14 Orionis.		
Jan. 1	4 26	41.25	Jan. 24	4 32	35.32	Jan. 19	4 42	56.25	Jan. 7	4 50	12.39	Jan. 14	4 59	7.16
3		41.46				22		56.51	14		12.25	15		7.06
7		41.34				24		56.45	15		12.25	16		7.08
10		41.24	A. S. C. 547.			5 Orionis.			ϵ Aurigæ.			β Eridani.		
22		41.27	Jan. 11	4 35	30.76	Jan. 17	4 44	59.05	Jan. 17	4 50	25.49	Jan. 7	4 59	56.17
23		41.25	15		30.64	21		59.13	23		25.60	8		56.06
24		41.28	16		30.54	22		59.30	Feb. 12		25.85	11		56.27
28		41.43	μ Eridani.			ω Eridani.			ζ Aurigæ.			16 Orionis.		
30		41.26	Jan. 7	4 37	27.14	Jan. 16	4 44	59.04	Jan. 19	4 51	13.94	Feb. 23	5 0	28.52
Feb. 1		41.12	8		27.16	19		59.09	Feb. 14		14.32	μ Aurigæ.		
4		41.39	10		27.20	24		59.19	63 Eridani.			Feb. 23	5 2	25.46
Mar. 2		41.27	A. S. C. 552.			6 Orionis.			Jan. 11	4 52	13.53	Mar. 6		25.28
April 10		41.35	Jan. 15	4 38	5.23	Jan. 11	4 45	51.39	14		13.24	ι Leporis.		
11		41.27	16		5.35	14		51.20	15		13.15	Feb. 23	5 4	47.45
23		41.23	19		5.31	15		51.21	64 Eridani.			α Aurigæ.		
24		41.33	58 Eridani.			8 Orionis.			Jan. 16	4 52	26.73	Jan. 7	5 4	48.38
May 7		41.42	Jan. 7	4 40	22.67	Jan. 28	4 45	52.14	17		26.90	10		48.29
10		41.31	8		22.53	Feb. 12		52.22	21		26.93	11		48.31
June 16		41.18	14		22.64	π^2 Orionis.			δ Tauri.			14		48.33
July 2		41.13	1 Orionis.			Jan. 7	4 46	2.24	Jan. 29 4 53 28.63			22		48.29
Aug. 3		41.40	Jan. 15	4 41	6.10	8		2.15				23		48.39
Dec. 16		41.32	16		6.05	10		2.18						
20		41.36	17		6.18									
31		41.30												
ν^2 Eridani.														
Jan. 17	4 28	16.57												
19		16.52												
21		16.51												
49 Eridani.														
Jan. 7	4 28	56.09												
8		55.97												
11		56.11												

α Aurigæ.			β Orionis.			β Tauri.			δ Orionis.			\ast D + 27° 41'.		
Jan. 24	<i>h. m. s.</i>		Feb. 20	<i>h. m. s.</i>		Jan. 10	<i>h. m. s.</i>		Jan. 1	<i>h. m. s.</i>		Jan. 7	<i>h. m. s.</i>	
26	5 4	48-33		5 6	48-13	11	5 16	7-11	23	5 23	46-94	8	5 31	55-49
28		48-31	22		48-27	22		7-02	29		46-92	11		55-42
29		48-32	Mar. 9		48-02	23		7-18	31		47-00	14		55-41
		48-20	12		48-07	26		7-12	Feb. 5		46-97			55-48
31		48-47	21		48-06			7-15			46-95	ζ Orionis.		
Feb. 4		48-35	April 8		48-23	28		7-04	11		46-97	Feb. 23	5 32	38-19
5		48-35				29		7-14	14		47-10	25		38-29
7		48-49	20		48-00	31		7-11	22		47-05	27		38-21
12		48-46	23		48-29	Feb. 2		7-12	27		47-04	\ast D + 27° 39'		
			Sept. 1		48-15	5		7-04	Mar. 6		46-87	Jan. 7	5 34	14-02
20		48-30	Dec. 16		48-14	7		7-08	21		46-93	8		13-99
22		48-39	18		48-23	11		7-25	23		47-05	11		14-12
Mar. 9		48-26	20		48-18	14		7-23	Sept. 1		46-96	14		14-01
12		48-15				16		7-27	Dec. 18		46-97	ν Orionis.		
21		48-48				22		7-20				Feb. 23	5 24	8-84
April 8		48-43	18 Orionis.			Mar. 6		6-90				25		8-82
20		48-26	Feb. 23	5 7	7-77	12		7-01	ϕ^1 Orionis.			ν Orionis.		
23		48-35				21		7-18	Feb. 23	5 24	8-84	8		13-99
24		48-36				23		7-32	25		8-82	11		14-12
May 7		48-31	τ Orionis.			April 8		7-16				14		14-01
10		48-23	Feb. 23	5 9	47-67	18		7-04	ϕ^1 Orionis.			52 Orionis.		
14		48-33	25		47-55	20		7-10	Feb. 23	5 25	59-13	Feb. 22	5 39	21-35
27		48-34	Mar. 9		47-41	23		7-10	25		59-19	ζ Leporis.		
28		48-39				May 7		7-18	27		59-10	Feb. 23	5 39	39-87
29		48-37	Groombridge 944.			10		7-20				25		39-82
			Jan. 2	5 11	6-21	27		7-20	ε Orionis.			27		39-87
30		48-35				Sept. 1		7-19	Feb. 11	5 28	2-68	ν Aurigæ.		
June 1		48-30	Groombridge 944 S.P.			Nov. 21		6-93	22		2-78	Mar. 21	5 40	20-14
3		48-38	July 1	5 11	4-90	Dec. 16		7-19	23		2-69	ν Aurigæ.		
5		48-33	9		4-63	18		7-05	25		2-84	Jan. 26	5 43	12-47
10		48-44	12		5-76	20		7-19	Mar. 6		2-92	Feb. 22		12-64
16		48-37				ξ Leporis.			21		2-75	Mar. 21	5 40	20-14
July 2		48-19	Jan. 2	5 11	6-21	ξ Leporis.			23		2-79	136 Tauri.		
Aug. 3		48-28				Feb. 27	5 16	8-30				Jan. 26	5 43	12-47
Sept. 1		48-37	Groombridge 944 S.P.			ξ Leporis.			ϕ^2 Orionis.			Feb. 22		12-64
Dec. 16		48-30	July 1	5 11	4-90	ξ Leporis.			ϕ^2 Orionis.			Mar. 21		12-54
			9		4-63	ξ Leporis.			ϕ^2 Orionis.			Sept. 1		12-72
18		48-39	12		5-76	ξ Leporis.			ϕ^2 Orionis.			55 Orionis.		
20		48-22	15		6-08	ξ Leporis.			ϕ^2 Orionis.			Feb. 23	5 43	35-82
β Orionis.			20		4-65	ξ Leporis.			ϕ^2 Orionis.			25		35-82
Jan. 10	5 6	48-07	λ Leporis.			ξ Leporis.			ϕ^2 Orionis.			27		35-92
11		48-17	Feb. 23	5 12	9-75	ξ Leporis.			ϕ^2 Orionis.			δ Aurigæ.		
14		48-10	25		9-68	ξ Leporis.			ϕ^2 Orionis.			Feb. 23	5 46	16-53
22		48-25	Mar. 9		9-41	ξ Leporis.			ϕ^2 Orionis.			25		16-60
26		48-19	23 Orionis.			ξ Leporis.			ϕ^2 Orionis.			27		16-51
			Feb. 23	5 12	9-75	ξ Leporis.			ϕ^2 Orionis.			δ Aurigæ.		
28		48-12	25		9-68	ξ Leporis.			ϕ^2 Orionis.			Feb. 23	5 46	16-53
29		48-26	Mar. 9		9-41	ξ Leporis.			ϕ^2 Orionis.			25		16-60
Feb. 2		47-93	23 Orionis.			ξ Leporis.			ϕ^2 Orionis.			27		16-51
4		48-32	Feb. 23	5 12	9-75	ξ Leporis.			ϕ^2 Orionis.			δ Aurigæ.		
5		48-10	25		9-68	ξ Leporis.			ϕ^2 Orionis.			Feb. 23	5 46	16-53
			Mar. 9		9-41	ξ Leporis.			ϕ^2 Orionis.			25		16-60
11		48-12	23 Orionis.			ξ Leporis.			ϕ^2 Orionis.			27		16-51
12		48-13	Feb. 23	5 14	22-66	ξ Leporis.			ϕ^2 Orionis.			δ Aurigæ.		
14		48-12	25		22-48	ξ Leporis.			ϕ^2 Orionis.			Feb. 23	5 46	16-53
16		47-94	27		22-49	ξ Leporis.			ϕ^2 Orionis.			25		16-60
β Orionis.			λ Leporis.			ξ Leporis.			ϕ^2 Orionis.			27		16-51
Jan. 10	5 6	48-07	λ Leporis.			ξ Leporis.			ϕ^2 Orionis.			δ Aurigæ.		
11		48-17	Feb. 23	5 12	9-75	ξ Leporis.			ϕ^2 Orionis.			Feb. 23	5 46	16-53
14		48-10	25		9-68	ξ Leporis.			ϕ^2 Orionis.			25		16-60
22		48-25	Mar. 9		9-41	ξ Leporis.			ϕ^2 Orionis.			27		16-51
26		48-19	23 Orionis.			ξ Leporis.			ϕ^2 Orionis.			δ Aurigæ.		
			Feb. 23	5 12	9-75	ξ Leporis.			ϕ^2 Orionis.			Feb. 23	5 46	16-53
28		48-12	25		9-68	ξ Leporis.			ϕ^2 Orionis.			25		16-60
29		48-26	Mar. 9		9-41	ξ Leporis.			ϕ^2 Orionis.			27		16-51
Feb. 2		47-93	23 Orionis.			ξ Leporis.			ϕ^2 Orionis.			δ Aurigæ.		
4		48-32	Feb. 23	5 12	9-75	ξ Leporis.			ϕ^2 Orionis.			Feb. 23	5 46	16-53
5		48-10	25		9-68	ξ Leporis.			ϕ^2 Orionis.			25		16-60
			Mar. 9		9-41	ξ Leporis.			ϕ^2 Orionis.			27		16-51
11		48-12	23 Orionis.			ξ Leporis.			ϕ^2 Orionis.			δ Aurigæ.		
12		48-13	Feb. 23	5 14	22-66	ξ Leporis.			ϕ^2 Orionis.			Feb. 23	5 46	16-53
14		48-12	25		22-48	ξ Leporis.			ϕ^2 Orionis.			25		16-60
16		47-94	27		22-49	ξ Leporis.			ϕ^2 Orionis.			27		16-51

α Orionis.			κ Aurigæ.			51 Hevelii (Cephei) S. P.			α Canis Majoris.			θ Canis Majoris.		
Jan. 28	h. m. s.	5 46 27.47	Feb. 22	h. m. s.	6 5 7.15	July 18	h. m. s.	6 22 51.84	Jan. 5	h. m. s.	6 38 3.14	Feb. 23	h. m. s.	6 46 42.76
Feb. 16		27.43	23		7.17	24		51.96	27		3.33	26		42.81
Mar. 2		27.42	Mar. 21		7.11	30		55.09	Feb. 6		3.31	Mar. 12		42.73
6		27.45	22		7.12	Aug. 2		53.79	20		3.32			
22		27.46	Sept. 29		7.18	7		53.61	26		3.23			
25		27.38	2 Lyncis.			12 Monocerotis.			Mar. 6		3.34	ι Canis Majoris.		
27		27.56							9		3.35	Mar. 12	6 48 57.63	
April 18		27.42	Mar. 2	6 5 25.17		Mar. 9	6 23 46.71		25		3.21	22	57.46	
May 7		27.30	27	24.80		14 Monocerotis.			April 9		3.17			
10		27.50	29	24.88					10		3.03			
20		27.32	5 Monocerotis.			Feb. 23	6 26 3.28		12		3.33	ω^1 Geminorum.		
27		27.46				Mar. 2	3.39		18		3.34	Sept. 2	6 52 35.97	
June 1		27.35	Feb. 23	6 7 0.29		9	3.32		19		3.24			
3		27.47				ν^2 Canis Majoris.			Sept. 29		3.16	19 Monocerotis.		
θ Aurigæ.			7 Monocerotis.			Mar. 12	6 29 39.94		18 Monocerotis.			Feb. 25	6 54 55.25	
Feb. 23	5 48 44.60		Mar. 2	6 11 57.71					Mar. 2	6 39 28.06		Mar. 12	55.53	
25	44.75		9	57.65		25 Geminorum.			12	27.98		April 9	54.96	
27	44.65		12	57.72		Jan. 5	6 31 12.21		22	27.95		γ Canis Majoris.		
2 Monocerotis.			μ Geminorum.			ϵ Geminorum.			ψ^2 Canis Majoris.			Feb. 26	6 56 28.46	
Feb. 23	5 51 25.86		Jan. 27	6 13 13.14		Jan. 27	6 34 1.44		Feb. 25	6 39 30.59		Mar. 2	28.72	
25	25.88		30	13.25		Feb. 22	1.42		36 Geminorum.			A. S. C. 874.		
27	25.88		Feb. 6	13.12		23	1.49		Jan. 5	6 41 53.63		April 10	6 56 48.65	
μ Orionis.			11	13.20		April 18	1.43		Groombridge 1119.			63 Aurigæ.		
Feb. 23	5 53 31.77		16	13.21		19	1.28		Feb. 5	6 42 6.95		Feb. 23	7 0 34.41	
25	31.67		20	13.22		Sept. 1	1.36		12	7.52		25	34.47	
27	31.67		27	13.19		29	1.38		14	8.62		26	34.36	
66 Orionis.			Mar. 18	13.28		42 Camelopardi.			25	8.78		τ Geminorum.		
Feb. 27	5 56 28.13		22	13.12		Mar. 2	6 34 8.38		27	10.84		Jan. 27	7 0 53.07	
Mar. 2	28.19		25	13.20		12	8.01		Groombridge 1119 S. P.			April 18	53.15	
τ Leporis.			April 9	13.11		29	8.02		July 24	6 41 57.31		Dec. 21	52.95	
Feb. 23	6 0 41.47		10	13.26		28 Geminorum.			Aug. 2	63.43		20 Monocerotis.		
A. S. C. 761.			Sept. 29	13.08		Jan. 5	6 34 32.97		7	65.63		Feb. 27	7 2 13.93	
Mar. 27	6 1 5.91		A. S. C. 793.			16 Monocerotis.			8	72.81		Mar. 2	13.98	
1 Lyncis.			Mar. 9	6 14 49.75		Feb. 23	6 37 45.62		12	66.42		9	13.85	
Feb. 27	6 3 3.91		12	49.81		27	45.52		15 Lyncis.			22 Monocerotis.		
Mar. 12	3.92		77 Orionis.			Mar. 12	45.64		Mar. 2	6 43 19.26		Mar. 2	7 3 38.62	
29	3.96		Mar. 9	6 18 57.94					April 9	18.92		22	38.45	
			12	57.91					10	19.03		April 9	38.51	

δ Geminorum.			δ^1 Canis Minoris.			δ^3 Canis Minoris.			α Geminorum.			6 Argûs.		
Jan. 27	<i>h. m. s.</i>	7 10 30.09	Mar. 9	<i>h. m. s.</i>	7 23 44.25	Mar. 9	<i>h. m. s.</i>	7 25 49.08	Jan. 27	<i>h. m. s.</i>	7 34 43.17	Mar. 5	<i>h. m. s.</i>	7 42 24.80
Feb. 4		30.03	12		44.28	12		49.03	28		43.22	23		24.65
6		30.12	April 9		44.00	April 9		43.90						
16		30.16	α Geminorum preceding			ν Geminorum.			β Geminorum.			9 Argûs.		
24		30.15				Sept. 2		7 25 59.57	Jan. 30		7 35 27.37	Mar. 5		7 44 18.83
26		30.18	Jan. 27		7 24 18.51				Feb. 21		27.25	18		18.95
Mar. 2		30.20	30		18.56	25 Monocerotis.			23		27.29	23		18.75
22		30.06	Feb. 4		18.44				24		27.18	A. S. C. 968.		
23		29.72	24		18.67	Feb. 23		7 29 16.47	26		27.20	Feb. 25		7 46 46.54
April 9		30.12	25		18.80	25		16.43	Mar. 5		27.24	26		46.42
11		30.08	26		18.55	27		16.44	18		27.14	Mar. 23		46.29
Sept. 29		30.14	Mar. 2		18.76	α Canis Minoris.			29		27.32	14 Canis Minoris.		
Dec. 21		30.16	5		18.75	Jan. 27		7 30 52.19	30		27.31	Feb. 23		7 49 59.67
65 Aurigæ.			8		18.71	30		52.14	April 9		27.43	24		59.64
Mar. 9		7 11 16.82	22		18.46	Jan. 27		7 30 52.19	11		27.34	27		59.79
12		16.87	30		18.56	30		52.25	13		27.46	28 Monocerotis.		
ι Geminorum.			April 4		18.82	Feb. 4		52.12	15		27.36	Mar. 5		7 53 1.70
Feb. 23		7 15 43.30	8		18.77	24		52.10	17		27.15	6 Cancri.		
24		43.30	11		18.58	26		52.17	18		27.25	Jan. 27		7 53 37.17
Sept. 29		43.18	13		18.67	Mar. 5		52.01	24		27.29	28		37.14
1 Canis Minoris.			15		18.57	8		52.06	May 25		27.24	Mar. 23		37.11
Mar. 9		7 16 1.45	17		18.35	24		52.08	28		27.36	24		37.30
12		1.51	18		18.60	29		52.28	29		27.34	13 Argûs.		
22		1.23	19		18.45	30		52.14	30		27.17	Feb. 25		7 53 53.34
ϵ Canis Minoris.			24		18.55	April 8		52.15	June 1		27.36	26		53.17
Feb. 27		7 16 50.84	Sept. 29		18.66	9		52.11	3		27.33	27		53.34
Mar. 23		50.60	Dec. 21		18.53	11		52.16	5		27.33	55 Camelopardi.		
April 10		50.71	α Geminorum following.			13		52.22	8		27.27	Feb. 23		7 56 42.03
β Canis Minoris.						15		52.12	11		27.20	29 Monocerotis.		
Feb. 23		7 18 25.03	Jan. 27		7 24 18.93	17		52.02	13		27.28	Mar. 18		8 0 30.01
24		24.95	30		18.96	18		52.14	14		27.30	23		29.88
25		25.11	Feb. 4		18.96	19		52.04	17		27.21	25		29.68
η Canis Minoris.			24		19.12	24		52.12	19		27.35	β Cancri.		
Feb. 26		7 19 22.49	25		19.17	May 25		52.11	29		27.25	Mar. 23		8 7 46.58
27		22.50	26		19.10	29		52.09	July 29		27.25	25		46.42
Mar. 2		22.47	Mar. 2		19.26	30		52.12	Sept. 2		27.24	4 Argûs.		
γ Canis Minoris.			5		19.13	31		52.18	29		27.32	Feb. 24		7 38 32.15
Mar. 9		7 19 23.79	8		19.09	June 1		52.10	Feb. 23		7 37 24.19	27		32.12
22		23.47	22		18.99	3		52.16	25		24.24	Mar. 5		31.86
23		23.47	23		18.97	5		52.15	Mar. 2		24.25	26 Monocerotis.		
			30		19.11	8		52.06	π Canis Minoris.			4 Argûs.		
			April 4		19.19	13		52.08	Feb. 23		7 37 24.19	Feb. 24		7 38 32.15
			8		19.02	14		52.01	25		24.24	27		32.12
			11		19.01	17		52.11	Mar. 2		24.25	Mar. 5		31.86
			13		19.05	Sept. 2		52.09	π Canis Minoris.			4 Argûs.		
			15		18.92	29		52.20	Feb. 23		7 37 24.19	Feb. 24		7 38 32.15
			17		18.87	26 Monocerotis.			25		24.24	27		32.12
			18		18.93	Feb. 24		7 33 33.27	Mar. 2		24.25	Mar. 5		31.86
			19		18.93	26		33.09	4 Argûs.			4 Argûs.		
			24		19.07	Mar. 2		33.43	Feb. 24		7 38 32.15	Feb. 24		7 38 32.15
			Sept. 29		19.01				27		32.12	27		32.12
			Dec. 21		19.06				Mar. 5		31.86	Mar. 5		31.86

Groombridge 1418.			δ Hydræ.			14 Hydræ.			π^1 Cancri.			α Hydræ.		
Feb. 27	h. m. s.	8 7 61.85	Mar. 18	h. m. s.	8 29 7.70	Mar. 12	h. m. s.	8 41 16.32	April 21	h. m. s.	9 3 28.48	Mar. 24	h. m. s.	9 19 40.55
Mar. 2		61.13	21		7.49	18		16.05				29		40.36
12		60.18	23		7.47	21		15.95	A. S. C. 1117.			30		40.44
18		60.68	σ Hydræ.			ξ^2 Cancri.			Mar. 18	9 4 24.85		April 21		40.36
21		59.54	Mar. 27	8 30 20.21		Mar. 23	8 42 59.39		21	24.71		May 2		40.54
λ Cancri.			29	20.20		27	59.56		23	24.70		τ^1 Hydræ.		
Feb. 24	8 10 57.22		6 Hydræ.			ξ^4 Cancri.			21 Hydræ.			Mar. 18	9 20 58.56	
22 Argûs.			Mar. 12	8 32 24.03		Mar. 24	8 46 0.04		Mar. 29	9 4 28.85		21	58.35	
Mar. 25	8 15 12.49		18	23.83		ζ Hydræ.			April 8	28.79		23	58.31	
1 Hydræ.			21	23.60		Mar. 23	8 46 52.49		10	28.85		λ Leonis.		
Mar. 21	8 16 33.21		γ Cancri.			25	52.53		π^2 Cancri.			Jan. 29	9 22 31.13	
23	33.17		Feb. 24	8 33 57.67		29	52.55		Mar. 24	9 6 19.93		30	31.28	
2 Hydræ.			25	57.72		A. S. C. 1099.			April 21	19.93		Feb. 25	31.51	
Mar. 18	8 18 24.69		9 Hydræ.			Mar. 25	8 52 35.98		23 Hydræ.			April 21	31.15	
21	24.39		Mar. 25	8 34 14.97		27	35.91		Mar. 23	9 8 41.90		τ^2 Hydræ.		
23	24.44		29	14.93		30	35.88		April 8	41.72		Mar. 30	9 23 46.17	
θ Cancri.			δ Cancri.			A. S. C. 1103.			10	41.70		April 8	46.25	
Mar. 23	8 22 24.28		Jan. 28	8 35 31.54		Mar. 18	8 56 16.17		83 Cancri.			10	46.14	
A. S. C. 1041.			April 21	31.61		21	15.77		Mar. 24	9 9 59.10		ι Hydræ.		
Mar. 25	8 24 16.75		ι Cancri.			23	15.77		25	59.05		Mar. 18	9 31 37.77	
27	16.90		Mar. 18	8 36 56.46		ω Hydræ.			40 Lyncis.			21	37.77	
29	16.80		22	56.41		Mar. 25	8 57 29.37		Mar. 18	9 11 13.85		25	37.85	
A. S. C. 1044 preceding.			ϵ Hydræ.			29	29.52		21	13.55		\circ Leonis.		
Mar. 18	8 27 17.17		Feb. 21	8 38 14.68		30	29.42		April 10	13.63		Jan. 29	9 32 33.16	
21	16.97		24	14.73		ξ Cancri.			27 Hydræ.			30	33.09	
27	17.00		Mar. 5	14.67		Jan. 28	9 0 5.51		Mar. 29	9 12 37.16		Feb. 25	33.28	
29	16.99		25	14.54		29	5.42		30	37.08		26	33.11	
A. S. C. 1044 following.			27	14.55		Mar. 24	5.42		April 8	37.13		α Hydræ.		
Mar. 18	8 27 17.40		29	14.57		25	5.40		A. S. C. 1141.			Mar. 30	9 32 35.09	
21	17.24		April 4	14.54		April 21	5.42		Mar. 24	9 15 40.93		April 8	35.10	
27	17.33		May 2	14.77		20 Hydræ.			α Hydræ.			10	35.04	
29	17.32		ζ Hydræ.			Mar. 29	9 1 42.96		Mar. 5	9 19 40.53		ψ Leonis.		
			Mar. 22	8 39 54.13		April 8	43.00		18	40.41		April 21	9 34 57.12	
			27	53.95		10	42.95		ϵ Leonis.			Jan. 30	9 36 41.85	
			29	53.92								Mar. 12	42.22	

ε Leonis.			η Leonis.			γ Leonis preceding.			33 Sextantis.			ζ Leonis.		
Mar. 18	h. m. s.		Mar. 25	h. m. s.		Feb. 27	h. m. s.		Mar. 23	h. m. s.		Feb. 27	h. m. s.	
April 4		41.94		9 58 32.55			10 11 5.03			10 33 12.64		April 24	10 56 42.61	
17		42.03	α Leonis.			γ Leonis following.			40 Leonis Minoris.			67 Leonis.		
21		41.81				Feb. 27	10 11 5.20		Mar. 29	10 34 10.47		Mar. 12	11 0 10.24	
May 2		41.98	Feb. 27	9 59 47.63					April 17	10.94		April 18	10.28	
June 15		41.90	28	47.56		μ Ursæ Majoris.			18	10.83		19	10.31	
16		42.00	Mar. 12	47.58		Mar. 12	10 12 42.81		3 Hydræ & Crateris.			δ Leonis.		
22 Leonis.			18	47.49		April 17	42.74		Mar. 18	10 38 59.08		Feb. 28	11 5 32.11	
Mar. 18	9 42 43.88		April 17	47.43			42.92		21	58.93		Mar. 9	32.42	
21	43.67		19	47.51		23 Sextantis.			25	58.94		April 13	32.04	
25	43.87		21	47.71		Mar. 30	10 12 42.70		53 Leonis.			19	32.36	
6 Sextantis.			23	47.43		30 Leonis Minoris.			44 Leonis Minoris.			20	32.31	
Mar. 30	9 43 7.09		26	47.16		Mar. 30	10 16 39.86		Jan. 30	10 40 47.27		26	32.29	
April 10	7.08		27	47.18		April 8	39.83		Feb. 27	47.50		27	32.16	
17	7.38		May 2	47.42			40.20		28	47.20		29	32.14	
10 Sextantis.			9	47.33		μ Hydræ.			ν Hydræ & Crateris.			May 1	32.25	
April 8	9 47 53.31		13	47.32		Mar. 18	10 18 18.33		Mar. 12	10 41 2.11		2	32.06	
ν Leonis.			14	47.34		21	18.33		30	1.91		6	32.12	
Mar. 25	9 49 33.22		25	47.57		25	18.15		April 8	1.77		7	32.19	
A. S. C. 1195.			June 15	47.38		A. S. C. 1245.			6 Hydræ & Crateris.			9	32.07	
April 10	9 51 21.74		16	47.45		Mar. 12	10 20 34.40		Mar. 18	10 41 41.11		11	32.09	
A. S. C. 1199.			19	47.32		18	34.32		21	40.97		13	32.15	
Mar. 18	9 54 44.86		July 3	47.45		ε Leonis.			29	40.93		20	32.01	
29	44.76		4	47.44		Jan. 30	10 24 19.63		55 Leonis.			23	32.30	
April 8	44.68		13	47.38		June 16	19.76		Mar. 29	10 47 25.22		24	32.29	
ν ² Hydræ.			15	47.44		17	19.62		April 8	37.00		25	32.28	
Mar. 18	9 57 17.03		λ ² Hydræ.			1 Hydræ & Crateris.			δ Hydræ & Crateris.			27	32.38	
21	16.97		Mar. 25	10 2 44.30		Mar. 25	10 28 25.02		Feb. 28	11 11 17.60		28	32.32	
29	16.92		29	44.14		29	25.12		April 20	17.86		29	32.26	
21 Leonis Minoris.			April 8	44.09		April 8	24.92		May 6	17.64		30	32.21	
Mar. 30	9 57 54.61		Groombridge 1620.			φ ³ Hydræ & Crateris.			9	17.74		31	32.17	
April 8	54.60		Feb. 27	10 5 5.84		Mar. 18	10 30 44.45		Mar. 25	10 51 56.05		June 1	32.24	
10	54.76		Mar. 2	6.00		21	44.30		29	55.88		7	32.17	
22 Sextantis.			12	5.58		23	44.42		April 8	55.97		8	32.19	
Mar. 29	10 9 37.65		18	5.51		55 Leonis.			α Hydræ & Crateris.			16	32.17	
April 8	37.62		21	4.93		6 Hydræ & Crateris.			δ Hydræ & Crateris.			17	32.22	
10	37.68		21 Sextantis.			1 Hydræ & Crateris.			July 10	32.22		July 10	32.22	
21 Leonis Minoris.			Mar. 30	10 6 6.89		55 Leonis.			α Hydræ & Crateris.			δ Hydræ & Crateris.		
Mar. 18	9 57 17.03		April 8	6.97		Mar. 29	10 47 25.22		Mar. 25	10 51 56.05		Feb. 28	11 11 17.60	
21	16.97		10	6.89		α Hydræ & Crateris.			29	55.88		April 20	17.86	
29	16.92		22 Sextantis.			6 Hydræ & Crateris.			April 8	55.97		29	17.81	
21 Leonis Minoris.			Mar. 29	10 9 37.65		Mar. 18	10 30 44.45		α Hydræ & Crateris.			May 6	17.64	
Mar. 30	9 57 54.61		April 8	37.62		21	44.30		δ Hydræ & Crateris.			9	17.74	
April 8	54.60		10	37.68		23	44.42		Feb. 28	11 11 17.60		11	17.71	
10	54.76		22 Sextantis.			6 Hydræ & Crateris.			April 20	17.86		13	17.69	
21 Leonis Minoris.			Mar. 29	10 9 37.65		Mar. 18	10 30 44.45		May 6	17.64		16	17.62	
Mar. 30	9 57 54.61		April 8	37.62		21	44.30		9	17.74		δ Hydræ & Crateris.		
April 8	54.60		10	37.68		23	44.42		α Hydræ & Crateris.			δ Hydræ & Crateris.		
10	54.76		22 Sextantis.			6 Hydræ & Crateris.			δ Hydræ & Crateris.			δ Hydræ & Crateris.		

σ Leonis.			ζ Hydræ & Crateris.			2 Comæ Berenices.			20 Virginis.			49 Virginis.		
June 17	<i>h.</i> <i>m.</i> <i>s.</i> 11 12 49.87		Mar. 18	<i>h.</i> <i>m.</i> <i>s.</i> 11 36 36.47		April 17	<i>h.</i> <i>m.</i> <i>s.</i> 11 56 1.58		Mar. 18	<i>h.</i> <i>m.</i> <i>s.</i> 12 24 53.81		Dec. 28	<i>h.</i> <i>m.</i> <i>s.</i> 12 59 28.06	
λ Hydræ & Crateris.			25 29	36.46 36.38		Groombridge 1850.			21 Virginis.			θ Virginis.		
Mar. 18	11 15 23.17		93 Leonis.			Mar. 18	11 56 28.20		Mar. 1	12 25 28.30		Jan. 7	13 1 37.15	
21	23.11					21	27.63		May 22	28.69		Mar. 29	37.09	
25	23.14		Mar. 18	11 39 40.44		25	27.86		23	28.66		May 23	37.15	
79 Leonis.			21	40.11		29	28.34		Dec. 27	28.32		24	37.21	
May 6	11 15 46.48		April 18	40.64		30	26.54		γ Virginis.			α Virginis.		
7	46.60		β Leonis.			ϕ Virginis.			April 26 12 33 30.37			Mar. 27 13 16 43.06		
κ Hydræ & Crateris.			Feb. 28	11 40 50.59		Mar. 29	11 57 0.18		ψ Virginis.			30 43.11		
Mar. 29	11 19 3.07		April 13	50.38		April 24	0.57		Jan. 7 12 45 59.16			April 26 43.10		
April 8	2.92		17	50.85		A. S. C. 1393.			Mar. 29 59.15			27 43.30		
17	3.38		26	50.58		May 10 11 57 45.46			30 59.16			30 43.01		
τ Leonis.			May 1	50.49		10 Virginis.			12 Canum Venaticorum.			May 6 43.11		
April 24	11 19 39.53		6	50.82		Mar. 1 12 1 26.27			Mar. 19 12 48 29.12			22 43.24		
86 Leonis.			9	50.48		η Virginis.			April 26 29.37			23 42.98		
Mar. 21	11 22 4.38		10	50.42		Mar. 1 12 11 40.11			29 29.08			24 42.97		
23	4.39		11	50.43		29 40.11			30 29.00			June 10 43.35		
April 8	4.27		16	50.41		May 22 40.46			May 30 29.23			Dec. 28 43.13		
θ Hydræ & Crateris.			12	50.57		June 19 40.12			June 5 29.24			Groombridge 2007.		
Mar. 21	11 28 30.96		15	50.56		17 Virginis.			7 29.19			Mar. 21 13 21 27.48		
23	30.78		27	50.54		Mar. 1 12 14 20.69			8 29.27			25 27.14		
25	31.00		30	50.55		Groombridge 1884.			14 29.18			29 27.32		
ν Leonis.			Aug. 8	50.50		Mar. 21 12 14 25.74			15 29.33			April 8 26.46		
Feb. 28	11 28 42.35		30	50.60		25 23.38			17 29.28			18 29.21		
24 Hydræ & Crateris.			β Virginis.			April 8 24.46			19 29.13			ζ Virginis.		
Mar. 21	11 30 29.63		Feb. 28	11 42 18.41		10 25.32			20 29.17			April 15 13 26 29.43		
29	29.65		April 24	18.77		A. S. C. 1432.			29 29.15			82 Virginis.		
April 8	29.41		η Hydræ & Crateris.			May 11 12 19 36.26			July 3 29.17			Mar. 21 13 33 10.11		
A. S. C. 1367.			Mar. 18	11 47 49.06		A. S. C. 1434.			Aug. 8 29.14			April 15 9.99		
May 9	11 35 41.73		21	49.00		Mar. 1 12 20 5.83			9 29.33			89 Virginis.		
β Virginis.			23	49.09					21 29.30			Jan. 7 13 41 8.05		
Feb. 28	11 28 42.35		A. S. C. 1390.						26 29.22			8 8.07		
24 Hydræ & Crateris.			Mar. 1	11 55 31.21					27 29.15			May 25 7.80		
Mar. 21	11 30 29.63		A. S. C. 1367.						Sept. 3 29.10			Dec. 28 8.10		
29	29.65		May 9 11 35 41.73						10 29.25			29 7.99		
April 8	29.41								Oct. 24 29.21			η Bootis.		
A. S. C. 1367.									Nov. 10 28.98			April 27 13 47 1.18		
May 9	11 35 41.73								12 29.05			30 1.21		

η Bootis.			α Bootis.			γ^1 Libræ.			Groombridge 2283 S.P.			σ Scorpii.		
May 6	<i>h. m. s.</i>		July 3	<i>h. m. s.</i>		Feb. 6	<i>h. m. s.</i>		Jan. 11	<i>h. m. s.</i>		May 27	<i>h. m. s.</i>	
9	13 47	0.99	4	14 8	19.14	15	3	3.17	12	15 32	34.41	16	11	24.53
11		1.22			19.10	β Libræ.					33.16	α Scorpii.		
13		1.18	8		19.14	α Serpentis.			α Serpentis.			May 27	16 19	32.53
20		1.28	30		19.15	Feb. 6	15 8	20.91	Feb. 6	15 36	20.45	June 10		32.60
21		1.08	Sept. 7		19.14	June 12		21.14	May 21		20.51	July 9		32.61
22		1.08	13		19.15	20		21.19	June 12		20.26	12		32.73
23		1.13	17		19.08	July 8		21.14	July 1		20.45	20		32.75
24		1.09	21		19.16	15		21.01	8		20.50	21		32.84
25		0.92	23		19.08	α Coronæ borealis.			13		20.55	$\ast D + 15^\circ 40'$		
28		0.91	25		19.05	Feb. 6	15 27	52.23	20		20.51	July 3	16 42	39.88
29		1.06	26		19.19	April 30		52.52	24		20.54	4		39.64
31		1.16	Oct. 2		19.00	May 21		52.28	Aug. 5		20.56	8		39.63
June 7		1.41	5		19.17	June 3		52.12	8		20.57	$\ast D + 16^\circ 4'$		
14		1.18	17		19.23	12		52.18	21		20.51	July 3	16 43	55.86
15		1.05	19		19.23	20		52.34	24		20.61	4		55.58
20		1.06	21		19.09	28		52.32	26		20.47	8		55.63
29		1.03	Nov. 15		19.20	July 3		52.23	27		20.60	$\ast D + 16^\circ 4'$		
July 3		1.16	Dec. 28		19.26	4		52.39	Sept. 18		20.55	July 3	16 43	55.86
4		1.05	29		19.33	8		52.39	25		20.47	4		55.58
8		0.98	ϵ Bootis.			20		52.40	Oct. 2		20.38	8		55.63
30		1.14	April 29	14 37	57.37	28		52.32	5		20.46	$\ast D + 16^\circ 4'$		
Aug. 5		1.05	May 14		57.36	Aug. 5		52.42	18		20.43	$\ast D + 16^\circ 4'$		
Sept. 4		1.07	16		57.34	7		52.39	19		20.49	$\ast D + 16^\circ 4'$		
7		1.11	20		57.46	8		52.36	28		20.53	$\ast D + 16^\circ 4'$		
13		1.06	22		57.38	9		52.36	Nov. 12		20.43	$\ast D + 16^\circ 4'$		
Oct. 19		1.05	27		57.25	26		52.32	δ Scorpii.			$\ast D + 16^\circ 4'$		
28		1.12	June 12		57.47	Sept. 13		52.34	Feb. 6	15 41	18.37	$\ast D + 16^\circ 4'$		
Dec. 29		0.94	13		57.42	18		52.36	May 27		18.25	$\ast D + 16^\circ 4'$		
α Bootis.			19		57.32	21		52.32	δ Scorpii.			$\ast D + 16^\circ 4'$		
α Bootis.			28		57.33	23		52.37	Feb. 6	15 50	49.31	$\ast D + 16^\circ 4'$		
α Bootis.			29		57.38	25		52.38	β^1 Scorpii.			$\ast D + 16^\circ 4'$		
α Bootis.			July 15		57.29	26		52.33	July 20	15 56	5.11	$\ast D + 16^\circ 4'$		
α Bootis.			24		57.32	Oct. 2		52.29	21		5.04	$\ast D + 16^\circ 4'$		
α Bootis.			Sept. 13		57.28	5		52.43	δ Ophiuchi.			$\ast D + 16^\circ 4'$		
α Bootis.			Oct. 29		57.43	17		52.57	June 10	16 5	54.73	$\ast D + 16^\circ 4'$		
α Bootis.			Dec. 28		57.30	18		52.38	July 1		54.67	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			19		52.36	2		54.70	$\ast D + 16^\circ 4'$		
α^2 Libræ.			Jan. 8	14 41	58.93	28		52.46	12		54.85	$\ast D + 16^\circ 4'$		
α^2 Libræ.			May 14		58.87	Nov. 12		52.24	20		54.73	$\ast D + 16^\circ 4'$		
α^2 Libræ.			16		59.11	χ Libræ.			24		54.82	$\ast D + 16^\circ 4'$		
α^2 Libræ.			22		58.84	May 27	15 30	46.29	30		54.74	$\ast D + 16^\circ 4'$		
α^2 Libræ.			25		58.89	χ Libræ.			Sept. 7		54.91	$\ast D + 16^\circ 4'$		
α^2 Libræ.			June 13		58.81	χ Libræ.			δ Ophiuchi.			$\ast D + 16^\circ 4'$		
α^2 Libræ.			July 15		58.93	χ Libræ.			June 10	16 5	54.73	$\ast D + 16^\circ 4'$		
α^2 Libræ.			24		59.00	χ Libræ.			July 1		54.67	$\ast D + 16^\circ 4'$		
α^2 Libræ.			Dec. 28		58.87	χ Libræ.			2		54.70	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			12		54.85	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			20		54.73	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			24		54.82	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			30		54.74	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			Sept. 7		54.91	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			δ Ophiuchi.			$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			June 10	16 5	54.73	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			July 1		54.67	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			2		54.70	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			12		54.85	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			20		54.73	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			24		54.82	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			30		54.74	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			Sept. 7		54.91	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			δ Ophiuchi.			$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			June 10	16 5	54.73	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			July 1		54.67	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			2		54.70	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			12		54.85	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			20		54.73	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			24		54.82	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			30		54.74	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			Sept. 7		54.91	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			δ Ophiuchi.			$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			June 10	16 5	54.73	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.			χ Libræ.			July 1		54.67	$\ast D + 16^\circ 4'$		
α^2 Libræ.			α^2 Libræ.											

θ Ophiuchi.			α Ophiuchi.			δ Ursæ Minoris.			δ Ursæ Minoris S. P.			β Lyræ.		
Aug. 18	<i>h.</i>	<i>m.</i> <i>s.</i>	Nov. 22	<i>h.</i>	<i>m.</i> <i>s.</i>	Feb. 12	<i>h.</i>	<i>m.</i> <i>s.</i>	Mar. 18	<i>h.</i>	<i>m.</i> <i>s.</i>	Jan. 13	<i>h.</i>	<i>m.</i> <i>s.</i>
	17	12 7.55		17	27 27.73		18	24 15.10		18	24 14.15		18	44 8.36
			23		27.76	14		14.82	21		14.19	Feb. 9		8.18
			27		27.72	July 8		17.91	22		15.09	13		8.19
* D + 32° 2'			Dec. 6		27.83	24		18.51			15.92	July 2		8.24
						27		16.98	23		14.15	9		8.28
July 3	17	15 30.53	7		27.80	30		13.39	25		15.30			
4		30.61	22		27.75	Aug. 8		14.04	27		14.69	16		8.14
8		30.55	* D + 34° 39'			26		15.56	29		15.83	17		8.07
* D + 32° 8'			July 9	17	28 0.52	30		14.91	30		13.91	18		8.19
			12		0.68	Sept. 2		15.36	April 10		16.02	Aug. 2		8.18
July 9	17	16 3.07	15		0.70	4		15.02	12		15.45	7		8.09
12		3.16	* D + 34° 52'			10		14.80	18		14.94	12		8.00
15		3.20	July 4	17	28 59.54	18		15.42	Sept. 1		15.24	13		8.13
* D + 34° 50'			8		59.52	23		15.67	2		14.36	18		8.20
July 3	17	20 59.51	9		59.33	25		15.06	29			24		8.26
4		59.54	20		59.49	26		15.50	24 Ursæ Minoris.			26		8.19
8		59.44	* D + 41° 15'			Oct. 5		15.26	July 18	18	30 18.69	27		8.12
* D + 35° 4'			July 3	17	45 20.67	7		15.23	24		18.45	30		8.07
July 3	17	23 43.06	4		20.91	10		14.57	30		13.99	31		8.23
4		43.11	8		20.68	17		16.40	Aug. 2		17.36	Sept. 2		8.21
8		43.03	* D + 41° 31'			19		15.40	7		16.00	3		8.22
* D + 34° 57'			July 3	17	50 4.20	25		14.90	24 Ursæ Minoris S. P.			4		8.12
July 3	17	26 7.57	4		4.24	28		15.34	Jan. 11	18	30 17.91	5		8.20
4		7.44	8		4.19	30		15.61	14		16.10	9		8.26
8		7.38	λ Sagittarii.			Nov. 16		14.81	15		17.05	10		8.14
α Ophiuchi.			July 24	18	18 2.29	20		12.57	α Lyræ.			11		8.16
July 1	17	27 27.86	δ Ursæ Minoris S. P.			22		14.81	Jan. 13	18	31 29.35	18		8.09
16		27.86	Jan. 1	18	24 14.98	26		15.05	Feb. 9		29.22	21		8.16
18		27.78	2		14.06	27		15.26	13		29.27	23		8.09
27		27.75	7		15.31	δ Ursæ Minoris.			16		29.25	25		8.12
29		27.87	8		14.59	Jan. 1	18	24 14.98	17		29.18	26		8.18
Aug. 7		27.74	11		15.82	2		14.06	25		29.39	28		8.05
9		27.89	14		14.88	7		15.31	27		29.27	30		8.08
12		27.83	15		15.00	8		14.59	July 2		29.32	Oct. 5		8.12
20		27.84	16		13.95	11		15.82	9		29.25	7		8.19
29		27.82	17		15.08	14		14.88	16		29.18	9		8.18
Sept. 2		27.83	19		15.50	15		15.00	17		29.39	13		8.21
4		27.81	21		15.13	16		13.95	25		29.27	18		8.23
17		27.63	22		16.30	17		15.08	27		29.41	19		8.19
Oct. 4		27.79	28		15.78	19		15.50	Aug. 2		29.26	21		8.21
13		27.72	Feb. 5		15.63	21		15.13	9		28.90	29		8.27
Nov. 20		27.72	6		14.02	22		16.30	13		29.30	Nov. 10		8.19
			12		14.29	26		15.78	18		29.13	11		8.01
			14		14.95	28		15.82	19		29.20	16		8.22
			23		13.36	Mar. 2		13.27	Sept. 28		29.28	20		8.15
			25		14.19	9		12.71	30		29.25	22		8.35
			27		13.88				Oct. 13		29.32	27		8.22
									21		29.29	Dec. 7		8.17
									Nov. 7		29.38	23		8.27
									11		29.07	26		8.22
												28		8.20
									13		29.10	σ Sagittarii.		
									23		29.18	July 24	18	45 17.03
									26		29.15	Aug. 20		16.59
									Dec. 5		29.19			
									6		29.35			

- Sagittarii.			δ Aquilæ.			α Aquilæ.			π Capricorni.			Groombridge 3402 S. P.		
Aug. 20	h. m. s.	18 56 52.91	Sept. 2	h. m. s.	19 17 22.66	Aug. 1	h. m. s.	19 42 55.52	Sept. 19	h. m. s.	20 18 5.90	Feb. 27	h. m. s.	20 45 14.83
ζ Aquilæ.			3		22.74	13		55.53	69 Aquilæ.			Mar. 2		15.69
July 9 18 58 0.69			5		22.82	19		55.60	Sept. 21 20 21 14.01			12		20.08
17 0.62			11		22.85	20		55.53	70 Aquilæ.			18		20.19
18 0.59			16		22.63	21		55.62	Sept. 21 20 21 14.01			21		21.13
25 0.55			17		22.84	24		55.60	1 Aquarii.			ζ Cygni.		
Aug. 1 0.62			18		22.82	29		55.62	Sept. 21 20 28 20.52			Jan. 2	21 6 5.21	
2 0.59			19		22.76	31		55.51	1 Aquarii.			8		5.24
9 0.63			20		22.76	Sept. 5		55.60	Sept. 21 20 31 9.73			9		5.16
12 0.62			Oct. 9		22.82	10		55.56	α Cygni.			12		5.20
19 0.61			10		22.84	11		55.56	Jan. 8 20 35 56.65			15		5.20
26 0.60			12		22.85	16		55.70	9 56.66			16		5.23
27 0.49			18		22.74	18		55.58	10 56.81			17		5.40
29 0.63			Nov. 16		22.81	19		55.57	12 56.65			19		5.17
31 0.64			γ Aquilæ.			20		55.61	15 56.75			21		5.28
Sept. 2 0.54			Jan. 25	19 38 36.38		21		55.56	16 56.63			26		5.22
3 0.61			April 7	36.29		23		55.54	21 56.69			Feb. 1 5.24		
4 0.56			July 17	36.17		26		55.57	23 56.80			Sept. 20		5.19
5 0.60			Aug. 1	36.24		Oct. 7		55.52	25 56.64			28		5.27
11 0.50			5	36.23		12		55.56	26 56.42			30		5.07
17 0.72			12	36.33		Nov. 16		55.55	28 56.72			Oct. 2		5.37
19 0.66			13	36.28		22		55.53	April 7 56.73			5		5.23
25 0.77			20	36.23		27		55.60	Sept. 16 56.86			8		5.26
30 0.80			21	36.32		Dec. 6		55.55	30 56.62			9		5.22
Oct. 9 0.55			29	36.22		7		55.60	Oct. 2 56.87			10		5.21
10 0.52			31	36.25		23		55.56	8 56.65			Nov. 5		5.26
12 0.54			Sept. 3	36.27		25		55.59	16 56.63			7		5.04
18 0.59			5	36.19		28		55.58	21 56.69			12		5.38
Nov. 10 0.56			11	36.32		β Aquilæ.			23 56.80			13		5.13
16 0.55			16	36.07		Jan. 2	19 47 24.31		25 56.64			28		5.20
20 0.64			17	36.36		18	24.12		26 56.60			30		5.12
22 0.63			19	36.25		April 7	24.14		27 56.73			Dec. 6 5.10		
23 0.54			20	36.32		Aug. 12	24.29		28 56.67			16		5.23
27 0.55			Oct. 7	36.23		13	24.26		29 56.72			21		5.13
Dec. 5 0.62			12	36.28		19	24.20		Jan. 2 21 23 4.73			26		5.16
7 0.55			Nov. 16	36.28		20	24.23		5 4.71			28		5.18
21 0.59			20	36.25		24	24.18		Sept. 28 4.82			Oct. 4		4.78
25 0.61			22	36.17		29	24.18		Oct. 9 4.71			10		4.71
			23	36.32		Sept. 10	24.23		17 4.64			Nov. 5		4.59
δ Aquilæ.			27	36.34		16	24.28		28 4.66			Dec. 21		4.68
July 17 19 17 22.87			Dec. 23	36.36		19	24.25		\downarrow Capricorni.			β Aquarii.		
18 22.77			25	36.29		20	24.25		Sept. 19 20 36 33.18			Jan. 2 21 23 4.73		
Aug. 1 22.85			26	36.32		21	24.35		3 Aquarii.			5 4.71		
2 22.73			28	36.27		23	24.21		Sept. 21 20 39 14.37			Sept. 28 4.82		
5 22.64			α Aquilæ.			26	24.24		3 Aquarii.			Oct. 4 4.78		
19 22.82			Jan. 2	19 42 55.56		Oct. 7	24.27		α^2 Capricorni.			9 4.71		
20 22.73			8	55.60		12	24.25		Aug. 24 20 9 6.85			10 4.71		
21 22.67			18	55.52		Dec. 25	24.25		Sept. 10 6.99			17 4.64		
27 22.86			25	55.62		α^2 Capricorni.			3 Aquarii.			Nov. 5 4.59		
31 22.80			July 17	55.53		Aug. 24	20 9 6.85		Sept. 21 20 39 14.37			28 4.66		
						Sept. 10	6.99					Dec. 21 4.68		

Groombridge 3548 S. P.				α Aquarii.				ζ Pegasi.				α Pegasi.				Groombridge 4101 S. P.			
Feb. 27	<i>h.</i> 21	<i>m.</i> 30	<i>s.</i> 16.85	Jan. 2	<i>h.</i> 21	<i>m.</i> 57	<i>s.</i> 30.73	Jan. 5	<i>h.</i> 22	<i>m.</i> 33	<i>s.</i> 26.10	Feb. 1	<i>h.</i> 22	<i>m.</i> 56	<i>s.</i> 44.80	Mar. 12	<i>h.</i> 23	<i>m.</i> 27	<i>s.</i> 46.94
Mar. 2			18.27	15			30.79	8			26.00	2			44.75				
18			18.52	19			30.78	9			26.14	18			44.62	18			47.83
21			18.51	21			30.71	15			26.07								
23			20.11	25			30.71	16			25.99	25			44.60				
ϵ Pegasi.				Sept. 9			30.78	17			26.09	June 4			44.76	ι Piscium.			
				24			30.88	Feb. 2			26.12	Sept. 7			44.60				
				Oct. 4			30.72	June 4			26.04	9			44.55	Jan. 20	23	31	40.30
				7			30.82	Sept. 7			25.98	12			44.61	June 4			40.29
Jan. 9	21	36	16.66	8			30.68	9			26.03					Sept. 22			40.32
12			16.67									13			44.67	Oct. 15			40.26
16			16.70									22			44.73	20			40.20
19			16.76	15			31.07	12			25.98	Oct. 15			44.47	Nov. 11			40.46
21			16.69	26			30.75	13			26.06	17			44.49	19			40.41
				Nov. 28			30.70	Oct. 8			25.98	20			44.58	Dec. 21			40.26
				κ Aquarii.				15			25.95	Nov. 21			44.82	27			40.33
25			16.72					17			25.98	Dec. 23			44.50				
26			16.63	Oct. 17	21	57	43.89	25			25.91	27			44.63	λ Piscium.			
Sept. 28			16.61	18			43.70	28			25.83	ϕ Aquarii.				Aug. 26	23	33	49.96
Oct. 4			16.70					29			25.89	Jan. 19	23	5	58.85	Oct. 19			49.84
8			16.64					31			26.09	June 4			58.90	20			49.76
								Nov. 21			26.28	Sept. 21			58.90	ω Piscium.			
10			16.71					28			26.09	22			58.83				
26			16.78					λ Aquarii.				Nov. 16			59.01				
Nov. 5			16.42	Sept. 20	22	8	19.95	Oct. 19	22	44	12.59	z^1 Piscium.				Jan. 19	23	51	2.82
28			16.69	21			20.06	α Pegasi.								20			2.79
δ Capricorni.																Sept. 22			2.94
Oct. 17	21	38	8.76	σ Aquarii.												23			2.85
18			8.49													Nov. 16			2.90
A. S. C. 2602.				Sept. 20	22	22	7.22	Jan. 8	22	56	44.67	Groombridge 4101 S. P.				17			3.00
Oct. 5	21	45	45.68	21			7.34	9			44.61					29 Piscium.			
A. S. C. 2607.				58 Aquarii.				15			44.81	Feb. 27	23	27	45.40	Aug. 26	23	53	34.41
								16			44.65	Mar. 2			45.28	Oct. 19			34.16
Oct. 5	21	49	46.68	Oct. 18	22	23	8.79	17			44.66	5			43.98	20			34.08
								19			44.69	9			44.98				
								21			44.62								

OBSERVATIONS
MADE WITH
THE MURAL CIRCLE,
IN THE YEAR 1839.

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
Jan. 1	(a) δ Draconis	26.7	28.4	+0.1	78 43 27.7	.....	44.3	29.44	43.8	-0 11.7	.....	51.6	+67 22 35.6
	α Orionis	28.5	31.4	+0.1	48 37 30.2	-0.1	39.9	29.39	40.8	+1 6.2	58.4	58.0	+7 22 21.7
	μ Geminorum	48.5	51.0	-0.1	33 24 49.7	-0.1	.....	.....	.....	+0 38.5	58.6	.....	+22 35 29.9
	(b) 51 (Hev.) Cephei.....	31.9	36.9	-0.1	328 45 34.3	+1.2	.....	.....	.....	-0 35.6	57.2	.....	+87 15 58.1
	(c) δ Ursæ Minoris S. P.	57.5	62.8	+0.1	322 37 0.1	-0.1	39.3	29.38	40.5	-0 44.8	57.7	.....	+86 35 17.2
	(d) δ Ursæ Minoris.....	12.8	17.1	-0.1	329 26 14.8	+0.2	37.7	29.51	39.0	-0 34.9	57.4	57.7	+86 35 17.6
	α Lyræ.....	32.5	34.7	-0.3	17 22 33.4	-0.1	.....	.....	.....	+0 18.4	57.4	.....	+38 38 6.0
Jan. 2	(e) Sun South L.....	17.4	20.1	+0.1	79 10 19.6	+0.1	.....	.....	.....	+4 58.2	.....	.....	-23 14 20.0
	(f) Sun North L.....	55.6	58.6	+0.1	78 37 57.3	-1.0	.....	.....	.....	+4 44.5	.....	.....	-22 41 43.1
	(g) ζ Pegasi.....	23.8	26.8	+0.1	46 0 25.4	-0.2	37.5	29.54	39.0	+1 1.1	58.6	.....	+9 59 31.4
	(h) μ Pegasi.....	5.8	8.4	-0.1	32 15 7.0	-0.1	.....	.....	.....	+0 37.2	.....	.....	+23 45 13.6
	(i) Uranus.....	9.0	11.6	+0.1	64 44 10.4	-0.8	.....	.....	.....	+2 4.4	.....	.....	-8 45 16.3
	(k) β Pegasi.....	39.3	41.5	-0.1	28 47 40.4	+0.6	.....	.....	.....	+0 32.4	.....	.....	+27 12 44.3
	(l) α Pegasi.....	36.3	39.8	0.0	41 39 38.1	-0.3	.....	.....	.....	+52.5	57.0	.....	+14 20 27.4
	59 Pegasi.....	2.8	4.0	+0.1	48 9 3.6	-0.1	37.0	29.54	38.8	+1 5.9	.....	.....	+7 50 48.3
	* R. A. 5 ^h 31 ^m 55 ^s	22.3	25.8	-0.1	28 19 24.0	-0.1	.....	.....	.....	+0 31.8	.....	.....	+27 41 2.0
	* R. A. 5 34 14	11.9	16.3	-0.1	28 21 13.9	-0.1	36.0	29.51	37.7	+0 31.9	.....	.....	+27 39 12.0
	β Aurigæ.....	14.2	17.5	-0.4	11 5 15.4	0.0	.....	.....	.....	+0 11.5	.....	.....	+44 55 30.8
	(m) 51 (Hev.) Cephei.....	32.6	36.0	-0.1	328 45 34.2	+1.6	.....	.....	.....	-0 35.9	57.5	.....	+87 15 57.8
	(d) δ Ursæ Minoris S. P.	59.1	63.0	+0.1	322 37 1.0	-0.3	.....	.....	.....	-0 45.2	58.4	.....	+86 35 17.8
	Vesta	47.7	50.5	-0.1	33 40 49.0	-0.1	37.0	29.49	37.9	+0 39.3	.....	.....	+22 19 29.5
Jan. 3	(n) β Cephei	45.9	50.7	-0.5	346 9 47.8	+0.1	46.8	28.90	45.9	-0 14.0	57.9	57.0	+69 51 23.1
	(o) α Aquarii.....	31.7	33.8	+0.1	57 5 32.8	-0.9	.....	.....	.....	+1 27.2	56.1	.....	-1 6 2.1
	ζ Cephei.....	14.7	19.4	-0.6	358 36 16.4	0.0	.....	.....	.....	-0 1.4	.....	.....	+57 24 42.0
Jan. 5	(p) μ Geminorum	47.6	50.3	-0.1	33 24 48.9	-0.2	30.8	28.96	37.5	+0 38.7	57.9	57.9	.....
	Vesta	7.9	11.0	-0.1	33 30 9.3	-0.1	.....	.....	.....	+0 38.9	.....	.....	+22 30 9.8
	54 Aurigæ	24.9	27.2	-0.1	27 36 25.9	-0.1	.....	.....	.....	+0 30.7	.....	.....	+28 24 1.4
	26 Geminorum.....	16.4	18.7	0.0	38 12 17.4	-0.1	.....	.....	.....	+0 46.2	.....	.....	+17 47 54.4
	(l) ξ^2 Geminorum.....	6.9	9.5	0.0	42 56 8.1	-0.3	.....	.....	.....	+0 54.6	.....	.....	+13 3 55.5
	33 Geminorum	15.1	18.0	0.0	39 37 16.4	-0.1	30.8	28.98	33.5	+0 48.6	.....	.....	+16 22 53.0
Jan. 7	(q) Moon South L.....	2.5	4.3	+0.1	67 21 3.4	+2.1	.....	.....	.....	+2 19.4	.....	58.9	-11 22 26.0
	(r)	21.8	23.0	+0.1	67 21 22.4	-17.3	28.0	28.71	31.6	+2 19.4	.....	.....	-11 22 25.6
Jan. 8	(s) Sun North L.....	2.8	5.7	+0.1	77 58 24.3	0.0	.....	.....	.....	+4 27.1	.....	.....	-22 1 52.5
	(t) Sun South L.	49.5	52.5	+0.1	78 30 51.1	-1.5	32.0	28.90	33.5	+4 39.4	.....	.....	-22 34 30.1
	(u) α Aquilæ	11.0	12.8	+0.1	47 33 12.1	-0.4	.....	.....	.....	+1 3.8	59.4	.....	+8 26 43.4
	μ Geminorum	48.1	50.9	-0.1	33 24 49.4	-0.1	26.8	29.02	30.3	+0 39.2	59.1	.....	+22 35 30.4
	Vesta	43.8	45.9	-0.1	33 19 44.8	-0.1	.....	.....	.....	+0 39.0	.....	.....	+22 40 35.2
	(v) 51 (Hev.) Cephei.....	33.4	37.1	-0.1	328 45 35.1	.....	.....	.....	.....	-0 36.2	58.4	.....	+87 16 0.0
	(w) δ Ursæ Minoris S. P.	57.8	61.7	+0.1	322 36 59.7	-0.4	26.8	29.03	29.7	-0 45.6	58.7	.....	+86 35 14.8
	(x) Moon South L.	55.5	56.0	+0.1	72 38 55.9	+8.2	.....	.....	.....	+3 9.5	.....	57.7	-16 41 15.9
	(y)	14.8	16.5	+0.1	72 39 15.8	-12.5	.....	.....	.....	+3 9.5	.....	.....	-16 41 15.1
	α Bootis	3.0	5.2	0.0	35 59 4.2	-0.1	26.1	29.26	28.7	+0 43.5	58.3	.....	+20 1 10.1
Jan. 9	(z) Sun North L.	15.6	18.6	+0.1	77 50 17.2	-1.9	28.1	29.47	30.2	+4 31.8	.....	.....	-21 53 49.4
	(g) Venus Centre	50.0	52.1	+0.1	78 18 51.2	-0.2	.....	.....	.....	+4 42.6	.....	.....	-22 22 35.9
	α Delphini	18.8	20.7	0.0	40 39 19.8	-0.1	.....	.....	.....	+0 51.6	.....	.....	+15 20 46.4
	(l) α Cygni.....	18.5	21.0	-0.4	11 18 19.4	+0.1	.....	.....	.....	+0 12.0	57.8	.....	+44 42 26.2
(a) After the observation of δ Draconis the Telescope was unclamped from the Circle, and being moved 90° 4' was again fixed.		(b) At 6 ^h 20 ^m 12 ^s .		(h) At Wire V.		(o) At 21 ^h 58 ^m 55 ^s .		(u) 1 ^m after transit.					
		(c) At 6 ^h 23 ^m 30 ^s .		(i) 50 ^s after transit.		(p) 20 ^s after transit.		(r) On meridian.					
		(d) At Wire III.		(k) At Wire I.		(q) At 13 ^h 16 ^m 39 ^s .		(w) At 6 ^h 26 ^m 20 ^s .					
		(e) At 18 ^h 49 ^m 44 ^s .		(l) 40 ^s after transit.		(r) At 13 ^h 18 ^m 0 ^s .		(x) At 14 ^h 1 ^m 31 ^s .					
		(f) At 18 ^h 51 ^m 8 ^s .		(m) At 6 ^h 19 ^m 40 ^s .		(s) At 19 ^h 16 ^m 50 ^s .		(y) At 14 ^h 3 ^m 6 ^s .					
		(g) At Wire IV.		(n) At 21 ^h 27 ^m 20 ^s .		(t) At 19 ^h 18 ^m 0 ^s .		(z) At 19 ^h 22 ^m 35 ^s .					

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
Jan. 9	ϵ Cygni.....	21.4	24.0	-0.2	22 38 22.2	-0.1	28.9	29.52	31.0	+0 25.0	.....	57.7	+33 22 10.6
	α Cephei.....	41.5	43.2	-0.6	354 6 41.7	0.0	.....	.....	.....	-0 6.3	57.1	.....	+61 54 22.3
	β Pegasi.....	40.8	43.2	-0.1	28 47 42.0	-0.1	28.0	29.57	31.5	+0 33.1	.....	.....	+27 12 42.7
	(a) 60 Pegasi.....	34.5	36.2	-0.1	30 1 35.2	-0.1	.....	.....	.....	+0 34.8	.....	.....	+25 58 47.8
	65 Pegasi.....	20.5	23.0	0.0	36 3 21.8	-0.1	.....	.....	.....	+0 43.9	.....	.....	+19 56 52.1
Jan. 10	α Persei.....	35.8	39.9	-0.5	6 43 37.4	0.0	42.1	29.43	41.0	+0 6.8	57.6	57.7	+49 17 13.5
	α Tauri.....	11.5	15.8	0.0	39 49 13.7	-0.1	44.0	29.42	42.6	+0 48.3	57.8	.....	+16 10 55.8
	γ Orionis.....	47.4	52.2	+0.1	49 47 50.0	-0.1	44.7	29.42	43.5	+1 8.3	.....	.....	+ 6 11 59.5
Jan. 11	α Orionis..... *	28.4	31.8	+0.1	48 37 30.3	-0.1	41.1	29.51	42.5	+1 6.3	57.7	58.6	+ 7 22 22.1
	μ Geminorum.....	48.0	52.5	-0.1	33 24 50.2	-0.1	.....	.....	.....	+0 38.6	59.3	.....	+22 35 29.9
	Vesta.....	40.8	44.0	-0.1	33 9 42.3	-0.1	.....	.....	.....	+0 38.2	.....	.....	+22 50 38.2
	(b) 51 (Hev.) Cephei.....	31.9	35.6	-0.1	328 45 33.6	+0.2	.....	.....	.....	-0 35.6	58.7	.....	+87 16 0.4
	(c) δ Ursæ Minoris S. P.....	55.0	60.9	+0.1	322 36 57.4	0.0	41.0	29.52	42.0	-0 44.9	58.5	.....	+86 35 13.9
	α Lyræ..... *	35.5	38.5	-0.3	17 22 36.6	-0.1	42.1	29.61	42.8	+0 18.3	57.4	57.5	+38 38 2.7
Jan. 12	(a) Sun South L.....	46.7	49.5	+0.1	77 55 48.2	-0.3	42.8	29.61	42.9	+4 26.3	.....	.....	-21 59 16.7
	α Aquilæ.....	8.5	11.8	+0.1	47 33 10.4	-0.1	.....	.....	.....	+1 3.8	57.3	.....	+ 8 26 43.4
	α Cygni.....	19.3	22.9	-0.4	11 18 20.8	0.0	43.0	.....	.....	+0 11.6	57.8	.....	+41 42 25.1
Jan. 14	Sun North L.....	19.4	22.8	+0.1	77 3 21.3	-0.1	40.0	29.15	40.9	+4 6.2	.....	58.1	-21 6 29.3
	(d) Groomb. 2283 S. P.....	20.6	24.6	0.0	323 51 22.5	.....	32.2	29.14	36.5	-0 43.2	.....	.....	+87 49 41.2
	* Pleiadum R. A. } 3 ^h 37 ^m 46 ^s	47.7	50.5	-0.1	32 46 48.9	-0.1	.....	.....	.....	+0 37.9	.....	.....	+23 13 31.1
	Piazzi III. 165.....	54.2	57.5	-0.1	32 38 55.8	-0.1	.....	.....	.....	+0 37.7	.....	.....	+23 21 24.7
	(d) Groombridge 750.....	6.5	10.9	-0.1	330 54 8.6	.....	.....	.....	.....	-0 32.9	.....	.....	+85 7 22.4
	35 Eridani.....	39.4	40.9	+0.1	57 59 40.3	-0.1	.....	.....	.....	+1 34.0	.....	.....	- 2 0 16.1
	66 Tauri.....	57.8	59.2	+0.1	46 54 58.6	-0.1	.....	.....	.....	+1 3.0	.....	.....	+ 9 4 56.6
	α Tauri.....	11.1	14.1	0.0	39 49 12.6	-0.1	.....	.....	.....	+0 49.1	57.4	.....	+16 10 56.5
	μ Eridani..... *	31.9	33.0	+0.1	59 32 32.4	-0.1	32.0	29.17	34.5	+1 40.0	.....	.....	- 3 33 14.2
	(a) 10 Camelopardi.....	55.4	58.3	-0.6	355 48 56.3	0.0	.....	.....	.....	-0 4.4	.....	.....	+60 12 6.2
	α Aurigæ.....	58.9	62.4	-0.4	10 11 0.2	0.0	.....	.....	.....	+0 10.6	58.0	.....	+45 49 47.3
	β Orionis.....	26.9	27.0	+0.1	64 22 26.9	-0.1	.....	.....	.....	+2 2.3	57.9	.....	- 8 23 31.0
	(d) Groombridge 944.....	49.8	53.1	-0.1	330 55 51.3	.....	.....	.....	.....	-0 33.0	.....	.....	+85 5 39.8
	γ Orionis.....	47.9	51.8	+0.1	49 47 50.1	-0.1	.....	.....	.....	+1 9.7	.....	.....	+ 6 11 58.4
	α Leporis.....	6.8	8.1	+0.1	73 54 7.6	-0.1	32.1	29.20	34.4	+3 21.5	.....	.....	-17 56 30.9
	* R. A. 5 ^h 31 ^m 55 ^s	22.6	26.0	-0.1	28 19 24.2	-0.1	.....	.....	.....	+0 31.8	.....	.....	+27 41 2.2
	* R. A. 5 34 14.....	11.8	15.9	-0.1	28 21 13.7	-0.1	.....	.....	.....	+0 31.8	.....	.....	+27 39 12.7
	β Aurigæ.....	12.8	16.2	-0.4	11 5 14.1	0.0	.....	.....	.....	+0 11.5	.....	.....	+44 55 32.5
	Vesta.....	57.8	60.5	-0.1	32 59 59.1	-0.1	.....	.....	.....	+0 38.3	.....	.....	+23 0 20.8
	(c) 51 (Hev.) Cephei.....	30.8	33.7	-0.1	328 45 32.1	+0.7	.....	.....	.....	-0 36.0	58.2	.....	+87 16 1.3
	(d) δ Ursæ Minoris S. P.....	55.6	59.0	+0.1	322 36 57.3	.....	31.8	29.20	34.0	-0 45.3	59.0	.....	+86 35 13.9
Jan. 15	Sun South L.....	57.2	60.1	+0.1	77 24 58.8	-0.1	35.6	29.39	37.2	+4 17.8	.....	57.7	-21 28 18.8
	α Cygni.....	20.9	23.2	-0.4	11 18 21.7	0.0	.....	.....	.....	+0 11.7	57.9	.....	+44 42 24.3
	η Cephei.....	9.9	13.5	-0.6	354 48 11.2	0.0	.....	.....	.....	-0 5.4	.....	.....	+61 12 51.9
	ζ Cygni.....	19.6	22.8	-0.2	26 26 20.9	-0.1	.....	.....	.....	+0 29.3	57.1	.....	+29 34 7.6
	α Cephei.....	43.5	45.8	-0.6	354 6 44.0	0.0	35.9	29.41	37.2	-0 6.2	57.8	.....	+61 54 19.9
	(a) ζ Cephei.....	19.0	22.5	-0.6	358 36 20.1	0.0	.....	.....	.....	-0 1.5	.....	.....	+57 24 39.1
	η Pegasi..... *	33.4	35.4	-0.2	26 37 34.1	-0.1	.....	.....	.....	+0 29.6	.....	.....	+29 22 54.1
	ι Cephei.....	38.0	40.9	-0.5	350 39 39.0	0.0	.....	.....	.....	-0 9.8	.....	.....	+65 21 28.5
	β Pegasi.....	40.2	43.8	-0.1	28 47 42.0	-0.1	36.0	29.47	37.8	+0 32.4	.....	.....	+27 12 43.1
	78 Pegasi.....	7.6	11.9	-0.1	27 32 9.5	-0.1	.....	.....	.....	+0 30.8	.....	.....	+28 28 17.5
	* Pleiadum R. A. } 3 ^h 37 ^m 46 ^s	48.9	52.2	-0.1	32 46 50.3	-0.1	.....	.....	.....	+0 38.3	.....	.....	+23 13 29.2
	26 Tauri (Pleiad.).....	34.8	37.0	-0.1	32 38 35.9	-0.1	34.0	29.55	35.9	+0 38.1	.....	.....	+23 21 43.8
	(d) Groombridge 750.....	5.9	9.8	-0.1	330 54 7.8	.....	.....	.....	.....	-0 33.1	.....	.....	+85 7 23.0
(a) 30 ^s after transit.					(c) At 6 ^h 21 ^m 50 ^s .					(e) At 6 ^h 21 ^m 30 ^s .			
(b) At 6 ^h 22 ^m 30 ^s .					(d) On meridian.								

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
Jan. 15	35 Eridani.....	38.0	40.2	+0.1	57 59 39.2	- 0.1	.....	.....	.....	+1 34.9	.....	57.7	- 2 0 16.3
	37 Eridani.....	55.7	57.1	+0.1	63 19 56.5	- 0.1	.....	.....	.....	+1 57.8	.....	.....	- 7 20 56.5
	66 Tauri.....	57.4	59.5	+0.1	46 54 58.6	- 0.1	.....	.....	.....	+1 3.5	.....	.....	+ 9 4 55.7
	46 Eridani.....	52.9	52.0	+0.1	63 3 52.6	- 0.1	.....	.....	.....	+1 56.5	.....	.....	- 7 4 51.3
	μ Eridani.....	31.1	32.8	+0.1	59 32 32.2	- 0.1	34.0	29.55	35.8	+1 40.8	.....	.....	- 3 33 15.2
	10 Camelopardi.....	55.2	57.9	-0.6	355 48 56.0	0.0	.....	.....	.....	-0 4.4	.....	.....	+60 12 6.1
	γ Orionis.....	49.2	51.9	+0.1	49 47 50.8	- 0.1	.....	.....	.....	+1 10.3	.....	.....	+ 6 11 56.7
	α Leporis.....	5.8	7.1	+0.1	73 54 6.6	- 0.1	.....	.....	.....	+3 23.2	.....	.....	-17 56 32.0
	* R. A. 5 ^h 31 ^m 55 ^s	22.2	25.8	-0.1	28 19 23.9	- 0.1	.....	.....	.....	+0 32.1	.....	.....	+27 41 1.8
	* R. A. 5 34 14	10.7	14.9	-0.1	28 21 12.6	- 0.1	33.7	29.56	35.3	+0 32.1	.....	.....	+27 39 13.1
	β Aurigæ.....	12.1	15.1	-0.4	11 5 13.2	0.0	.....	.....	.....	+0 11.6	.....	.....	+44 55 32.9
	(a) Vesta.....	45.3	47.2	-0.1	32 56 46.1	0.0	.....	.....	.....	+0 38.6	.....	.....	+23 3 33.0
	(b) 51 (Hev.) Cephei.....	30.0	33.5	-0.1	328 45 31.6	+ 0.8	.....	.....	.....	-0 36.3	57.8	.....	+87 16 1.6
	(c) δ Ursæ Minoris S. P.	54.8	58.3	+0.1	322 36 56.5	.....	33.7	29.57	35.4	-0 45.7	58.0	.....	+86 35 13.1
	(d) α Aquilæ.....	8.0	11.0	+0.1	47 33 9.7	- 0.4	.....	.....	.....	+1 5.2	57.1	57.8	+ 8 26 43.3
Jan. 16	Sun North L.....	28.1	30.8	+0.1	76 41 29.5	- 0.1	32.8	29.60	34.3	+4 7.2	.....	.....	-20 44 38.8
	Venus Centre.....	55.2	57.8	+0.1	76 42 56.7	- 0.1	32.5	29.61	34.0	+4 7.7	.....	.....	-20 46 6.5
	α Cygni.....	21.5	23.8	-0.4	11 18 22.3	0.0	.....	.....	.....	+0 11.9	58.5	.....	+44 42 23.6
	η Cephei.....	11.1	13.4	-0.6	354 48 11.8	0.0	.....	.....	.....	-0 5.5	.....	.....	+61 12 51.5
	(e) α Aquilæ.....	9.2	12.8	+0.1	47 33 11.2	- 0.2	32.7	29.79	34.0	+1 5.6	59.1	58.6	+ 8 26 42.0
Jan. 17	Sun South L.....	20.5	22.1	+0.1	77 2 21.3	- 0.1	.....	.....	.....	+4 15.0	.....	.....	-21 5 37.6
	47 Piscium.....	2.0	6.6	0.0	39 0 4.3	- 0.1	34.0	29.82	35.2	+0 48.6	.....	.....	+17 0 5.8
	π Andromedæ.....	25.3	29.4	-0.2	23 10 27.1	- 0.1	.....	.....	.....	+0 25.7	.....	.....	+32 50 5.9
	α Cassiopeæ.....	28.8	31.3	-0.5	0 21 29.5	0.0	.....	.....	.....	+0 0.3	58.5	.....	+55 39 28.8
	β Ceti.....	41.7	43.8	+0.1	74 49 42.9	- 0.1	.....	.....	.....	+3 37.6	.....	.....	-18 52 21.8
	* Pleiadum R. A. } 3 ^h 37 ^m 46 ^s	46.3	50.0	-0.1	32 46 47.9	- 0.1	.....	.....	.....	+0 38.9	.....	.....	+23 13 31.9
	Piazzi III. 165.....	54.3	57.8	-0.1	32 38 56.0	- 0.1	31.7	29.83	33.8	+0 38.7	.....	.....	+23 21 24.0
	35 Eridani.....	38.2	39.1	+0.1	57 59 38.8	- 0.1	.....	.....	.....	+1 36.3	.....	.....	- 2 0 16.4
	37 Eridani.....	54.2	55.8	+0.1	63 19 55.1	- 0.1	.....	.....	.....	+1 59.6	.....	.....	- 7 20 56.0
	ξ Eridani.....	32.3	33.5	+0.1	60 6 32.9	- 0.1	.....	.....	.....	+1 44.6	.....	.....	- 4 7 18.8
	46 Eridani.....	51.7	50.0	+0.1	63 3 51.0	- 0.1	.....	.....	.....	+1 58.2	.....	.....	- 7 4 50.5
	μ Eridani.....	30.9	32.8	+0.1	59 32 31.8	- 0.1	.....	.....	.....	+1 42.2	.....	.....	- 3 33 15.3
	10 Camelopardi.....	54.5	57.5	-0.6	355 48 55.5	0.0	32.0	29.83	33.7	-0 4.5	.....	.....	+60 12 7.6
	γ Orionis.....	48.8	52.0	+0.1	49 47 50.3	- 0.1	.....	.....	.....	+1 11.4	.....	.....	+ 6 11 56.7
	α Leporis.....	2.9	4.8	+0.1	73 54 4.0	- 0.1	.....	.....	.....	+3 26.3	.....	.....	-17 56 31.6
	ζ Orionis.....	16.8	18.8	+0.1	58 1 17.8	- 0.1	.....	.....	.....	+1 36.6	.....	.....	- 2 1 55.7
	β Aurigæ.....	11.2	14.8	-0.4	11 5 12.6	0.0	.....	.....	.....	+0 11.8	.....	.....	+44 55 34.2
	Vesta.....	34.0	36.3	-0.1	32 50 35.0	- 0.1	.....	.....	.....	+0 39.1	.....	.....	+23 9 44.6
	(f) 51 (Hev.) Cephei.....	31.8	34.0	-0.1	328 45 32.8	+ 0.4	.....	.....	.....	-0 36.9	58.7	.....	+87 16 2.3
	(e) δ Ursæ Minoris S. P.	55.2	58.8	+0.1	322 36 57.0	.....	29.5	29.83	31.2	-0 46.5	58.3	.....	+86 35 11.9
Jan. 20	γ Cephei.....	0.2	4.0	-0.4	339 17 1.6	0.0	39.9	29.30	40.4	-0 22.1	57.8	57.7	+76 44 18.2
	α Andromedæ.....	13.0	17.9	-0.1	27 48 15.4	- 0.1	.....	.....	.....	+0 30.7	57.8	.....	+28 12 11.7
	γ Pegasi.....	44.0	47.0	0.0	41 42 45.6	- 0.1	.....	.....	.....	+0 51.9	57.4	.....	+14 17 20.3
	(g) Moon South L.....	4.9	7.5	+0.1	53 34 6.3	- 9.2	.....	.....	.....	+1 18.9	.....	.....	+ 2 25 41.7
	(h).....	40.8	43.7	+0.1	53 33 42.4	+13.6	39.0	29.30	39.8	+1 18.9	.....	.....	+ 2 25 42.8
Jan. 21	α Cephei.....	45.7	48.5	-0.6	354 6 46.4	0.0	.....	.....	.....	-0 6.2	58.4	57.6	+61 54 17.4
	β Cephei.....	51.9	55.2	-0.5	346 9 53.1	0.0	36.0	29.47	37.8	-0 14.6	57.6	.....	+69 51 19.1
	η Pegasi.....	35.2	36.5	-0.2	26 37 35.8	- 0.1	35.9	29.50	37.8	+0 29.6	.....	.....	+29 22 52.3
	ϵ Cephei.....	39.6	42.6	-0.5	350 39 40.6	0.0	.....	.....	.....	-0 9.8	.....	.....	+65 21 26.8
	β Pegasi.....	43.1	45.3	-0.1	28 47 44.2	- 0.1	.....	.....	.....	+0 32.5	.....	.....	+27 12 41.0
	47 Piscium.....	2.3	6.8	0.0	39 0 4.5	- 0.1	35.2	29.54	37.4	+0 48.0	.....	.....	+17 0 5.2
	43 Piscium.....	11.1	16.6	0.0	37 12 13.7	- 0.1	.....	.....	.....	+0 45.0	.....	.....	+18 47 59.0

(a) 50^s after transit; faint.(b) At 6^h 21^m 20^s.

(c) On meridian.

(d) At Wire V.

(e) At Wire IV.

(f) At 6^h 22^m 12^s.(g) At 0^h 23^m 30^s.(h) At 0^h 24^m 51^s.

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.										observed.	adopted.	
Jan. 21	(a) α Ursæ Minoris	7.0	11.2	-0.1	327	34	9.0	+ 0.4	.....	In.	.....	-0 37.9	57.8	57.6	+88 27 26.1
	(b) Moon South L.	34.6	36.6	+0.1	46	39	35.7	-11.3	.....	.....	.....	+1 2.9	.....	.....	+ 9 20 30.3
	(c)	13.7	17.2	+0.1	46	39	15.6	+ 9.0	35.0	29.58	37.0	+1 2.9	.....	.....	+ 9 20 30.1
	(d) 26 Tauri (Pleid.)	34.0	35.7	-0.1	32	38	34.8	- 0.2	.....	.....	.....	+0 38.3	.....	.....	+23 21 44.7
	Piazzi III. 165.....	53.9	56.9	-0.1	32	38	55.4	- 0.1	33.0	29.64	36.4	+0 38.3	.....	.....	+23 21 24.0
	45 Tauri.....	42.0	45.5	+0.1	50	53	43.9	- 0.1	.....	.....	.....	+1 13.5	.....	.....	+ 5 6 0.3
	ξ Eridani	31.9	35.0	+0.1	60	6	33.5	- 0.1	.....	.....	.....	+1 43.7	.....	.....	- 4 7 19.5
	A. S. C. 526.....	37.9	38.1	+0.1	63	9	38.1	- 0.1	.....	.....	.....	+1 57.7	.....	.....	- 7 10 38.1
	A. S. C. 552.....	16.1	19.9	-0.5	349	57	17.4	0.0	33.0	29.66	35.0	-0 10.7	.....	.....	+66 3 50.9
	10 Orionis.....	47.1	49.9	+0.1	54	31	48.5	- 0.1	.....	.....	.....	+1 23.8	.....	.....	+ 1 27 45.4
	16 Orionis.....	49.1	50.8	+0.1	46	22	50.2	- 0.1	.....	.....	.....	+1 2.8	.....	.....	+ 9 37 4.7
	α Aurigæ.....	56.9	60.2	-0.4	10	10	58.1	0.0	.....	.....	.....	+0 10.7	57.8	.....	+45 49 48.8
	γ Orionis.....	46.5	49.5	+0.1	49	47	48.2	- 0.1	.....	.....	.....	+1 10.8	56.3	.....	+ 6 11 58.7
	α Leporis.....	3.9	6.3	+0.1	73	54	5.3	- 0.1	33.0	29.69	34.5	+3 24.5	.....	.....	-17 56 32.1
	ζ Orionis	15.8	19.9	+0.1	58	1	17.9	- 0.1	.....	.....	.....	+1 35.7	.....	.....	- 2 1 55.9
	θ Aurigæ.....	48.5	49.5	-0.3	18	48	48.8	- 0.1	.....	.....	.....	+0 20.4	.....	.....	+37 11 48.5
	(e) A. S. C. 761.....	6.0	10.1	-0.5	346	39	7.6	0.0	.....	.....	.....	-0 14.3	.....	.....	+69 22 4.3
	Vesta.....	38.0	40.0	-0.1	32	38	39.0	- 0.1	.....	.....	.....	+0 38.4	.....	.....	+23 21 40.3
Jan. 22	α Cygni.....	23.6	25.2	-0.4	11	18	24.1	0.0	35.7	30.04	36.5	+0 12.0	58.6	58.2	+44 42 22.1
	β Cephei	52.5	56.5	-0.5	346	9	54.0	0.0	35.7	.....	.....	-0 14.9	57.9	.....	+69 51 19.1
Jan. 23	(f) Sun North L.....	59.2	62.8	+0.1	75	13	1.2	- 0.6	36.2	30.11	37.0	+3 44.6	.....	57.5	-19 15 47.7
	α Cygni.....	22.6	26.1	-0.4	11	18	24.0	0.0	.....	.....	.....	+0 12.0	58.2	.....	+44 42 21.5
	α Tauri.....	9.9	14.0	0.0	39	49	12.0	- 0.1	38.0	30.12	38.5	+0 50.1	57.7	.....	+16 10 55.5
	α Aurigæ.....	55.0	59.8	-0.4	10	10	56.9	0.0	.....	.....	.....	+0 10.7	56.8	.....	+45 49 49.9
	ζ Orionis	16.9	19.9	+0.1	58	1	18.4	- 0.1	38.7	30.10	39.2	+1 35.8	.....	.....	- 2 1 56.6
	Vesta	53.9	57.3	-0.1	32	32	55.6	- 0.1	.....	.....	.....	+0 38.3	.....	.....	+23 27 23.7
	(g) 51 (Hev.) Cephei.....	28.1	31.2	-0.1	328	45	29.5	+ 0.3	.....	.....	.....	-0 36.5	57.5	.....	+87 16 4.2
	(h) δ Ursæ Minoris S. P.	51.8	55.2	+0.1	322	36	53.5	0.0	39.0	30.11	39.3	-0 46.0	57.3	.....	+86 35 10.0
Jan. 24	(i) ϵ Eridani.....	9.9	12.8	+0.1	65	59	11.5	- 1.1	40.5	29.98	41.0	+2 12.7	.....	57.9	-10 0 25.2
	η Tauri.....	0.5	4.8	-0.1	32	24	2.6	- 0.1	.....	.....	.....	+0 37.7	57.6	.....	+23 36 17.7
	26 Tauri (Pleid.) ...	33.9	37.1	-0.1	32	38	35.5	- 0.1	.....	.....	.....	+0 38.8	.....	.....	+23 21 43.7
	γ^1 Eridani	32.7	34.4	+0.1	69	56	33.6	- 0.1	.....	.....	.....	+2 41.3	58.9	.....	-13 58 16.9
	37 Tauri	52.5	57.8	0.0	34	21	55.0	- 0.1	.....	.....	.....	+0 40.6	.....	.....	+21 38 22.4
	45 Tauri	41.6	44.1	+0.1	50	53	43.0	- 0.1	.....	.....	.....	+1 13.0	.....	.....	+ 5 6 2.0
	(k) Moon South L.....	38.5	41.5	-0.1	30	58	40.0	- 5.4	.....	.....	.....	+0 35.7	.....	.....	+25 1 47.6
	(l)	31.2	32.7	-0.1	30	58	31.9	+ 4.0	.....	.....	.....	+0 35.7	.....	.....	+25 1 46.3
	α Tauri.....	10.1	14.2	0.0	39	49	12.2	- 0.1	40.9	29.98	41.1	+0 49.5	57.2	.....	+16 10 56.3
	τ Tauri.....	35.0	38.0	-0.1	33	21	36.3	- 0.1	.....	.....	.....	+0 39.1	.....	.....	+22 38 42.6
	(m) A. S. C. 552	15.0	19.5	-0.5	349	57	16.6	0.0	.....	.....	.....	-0 10.6	.....	.....	+66 3 51.9
	10 Orionis	48.9	51.1	+0.1	54	31	50.0	- 0.1	.....	.....	.....	+1 23.2	.....	.....	+ 1 27 44.8
	ι Tauri.....	52.0	55.5	0.0	34	38	53.8	- 0.1	.....	.....	.....	+0 41.0	.....	.....	+21 21 23.2
	(n) λ Leporis.....	13.5	15.8	+0.1	69	19	14.8	- 0.4	.....	.....	.....	+2 35.8	.....	.....	-13 20 52.3
	ζ Orionis	17.9	21.9	+0.1	58	1	20.0	- 0.1	41.0	29.93	41.5	+1 34.8	.....	.....	- 2 1 56.8
	θ Aurigæ.....	47.3	49.5	-0.3	18	48	48.2	- 0.1	.....	.....	.....	+0 20.2	.....	.....	+37 11 49.6
Jan. 25	Sun South L.....	52.4	57.2	+0.1	75	16	54.8	- 0.1	41.8	29.72	42.1	+3 39.9	.....	57.3	-19 19 37.3
	α Cygni.....	23.8	26.2	-0.4	11	18	24.7	0.0	.....	.....	.....	+0 11.7	58.0	.....	+44 42 20.9
	β Cephei.....	51.8	56.9	-0.5	346	9	53.9	0.0	41.7	.....	.....	-0 14.6	57.2	.....	+69 51 18.0
	22 Andromedæ.....	59.0	63.0	-0.4	10	50	0.6	0.0	.....	.....	.....	+0 11.3	.....	.....	+45 10 45.4
	γ Pegasi.....	42.7	46.7	0.0	41	42	44.8	- 0.1	40.7	29.76	41.7	+0 52.6	56.8	.....	+14 17 20.0
Jan. 26	(o) Sun North L.	34.7	37.8	+0.1	74	29	36.4	- 0.7	35.8	30.17	38.5	+3 34.5	.....	57.0	-18 32 13.2
	Venus Centre	41.7	45.7	+0.1	73	34	43.8	- 0.1	.....	.....	.....	+3 22.1	.....	.....	-17 37 8.8
	(m) α Cephei.....	46.1	49.2	-0.6	354	6	46.9	0.0	36.4	30.17	38.5	-0 6.3	57.2	.....	+61 54 16.4
(a) At Wire III.		(e) 24 ^s after transit.		(i) 1 ^m after transit.		(m) 30 ^s after transit.									
(b) At 1 ^h 15 ^m 50 ^s .		(f) At 20 ^h 22 ^m 46 ^s .		(k) At 4 ^h 6 ^m 52 ^s .		(n) At Wire IV.									
(c) At 1 ^h 17 ^m 10 ^s .		(g) At 6 ^h 22 ^m 0 ^s .		(l) At 4 ^h 8 ^m 16 ^s .		(o) At 20 ^h 34 ^m 32 ^s .									
(d) 20 ^s before transit.		(h) At 6 ^h 24 ^m 30 ^s .													

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.										observed.	adopted.	
Jan. 26	β Cephei	52.1	57.5	-0.5	346	9	54.3	0.0	.....	In.	.....	-0 15.0	57.1	57.0	+69 51 17.7
	ϵ Pegasi	34.1	37.2	+0.1	46	51	35.7	-0.1	.....	.....	.....	+1 4.4	56.0	.....	+9 8 17.0
	47 Piscium	1.0	5.8	0.0	39	0	3.4	-0.1	35.6	30.18	38.2	+0 49.0	.....	.....	+17 0 4.7
	π Andromedæ	25.0	28.0	-0.2	23	10	26.3	-0.1	.....	.....	.....	+0 25.9	.....	.....	+32 50 4.9
	(a) 57 Piscium	11.9	15.2	0.0	41	24	13.6	-0.2	.....	.....	.....	+0 53.3	.....	.....	+14 35 50.3
	(b) Moon North L.	25.1	29.5	-0.1	27	41	27.1	+1.1	.....	.....	.....	+0 31.9	.....	.....	+28 18 56.9
	(c)	25.8	29.5	-0.1	27	41	27.5	-1.1	34.5	30.25	37.8	+0 31.9	.....	.....	+28 18 58.7
	(d) 51 (Hev.) Cephei....	27.9	31.3	-0.1	328	45	29.5	+0.2	.....	.....	.....	-0 37.1	57.6	.....	+87 16 4.4
	(e) ϵ Geminorum	12.2	14.5	-0.1	30	43	13.4	-0.1	.....	.....	.....	+0 36.1	.....	.....	+25 17 7.6
Jan. 27	ϵ Geminorum	12.5	14.5	-0.1	30	43	13.5	-0.1	.....	.....	.....	+0 36.2	.....	57.7	+25 17 8.1
	α Canis Majoris	46.8	48.0	+0.1	72	27	47.6	-0.1	29.0	29.93	33.2	+3 10.4	57.1	.....	-16 30 0.2
	(f) Groombridge 1119....	17.4	21.8	0.0	326	58	19.7	0.0	.....	.....	.....	-0 39.8	.....	.....	+89 3 17.8
	τ Geminorum	14.2	16.5	-0.2	25	30	15.1	-0.1	.....	.....	.....	+0 29.1	.....	.....	+30 30 13.6
	δ Geminorum	51.9	53.4	-0.1	33	43	52.6	-0.1	.....	.....	.....	+0 40.7	.....	.....	+22 16 24.5
	(g) Moon North L.	47.9	51.6	-0.1	29	5	49.6	+4.7	.....	.....	.....	+0 33.9	.....	.....	+26 54 29.5
	(h)	56.7	60.5	-0.1	29	5	58.4	-3.8	.....	.....	.....	+0 33.9	.....	.....	+26 54 29.2
	α Geminorum follow.	20.9	24.0	-0.2	23	46	22.2	-0.1	.....	.....	.....	+0 26.9	58.5	.....	+32 14 8.7
	α Canis Minoris	44.5	45.7	+0.1	50	21	45.1	-0.1	.....	.....	.....	+1 13.6	57.6	.....	+5 37 59.1
	κ Geminorum	35.5	36.8	-0.1	31	13	36.1	-0.1	28.0	29.91	31.0	+0 37.0	.....	.....	+24 46 44.7
Jan. 28	(i) α Ursæ Minoris	7.0	11.5	-0.1	327	34	9.2	+0.1	36.3	29.30	37.2	-0 37.5	57.8	57.8	+88 27 26.0
	A. S. C. 552	15.0	19.0	-0.5	349	57	16.4	0.0	34.7	29.30	36.0	-0 10.5	.....	.....	+66 3 51.9
	(k) 16 Orionis	50.1	52.1	+0.1	46	22	51.3	-0.3	.....	.....	.....	+1 1.8	.....	.....	+9 37 5.0
	α Aurigæ	56.1	59.2	-0.4	10	10	57.2	0.0	.....	.....	.....	+0 10.6	57.5	.....	+45 49 50.0
	(a) β Orionis	28.0	28.8	+0.1	64	22	28.4	-0.3	.....	.....	.....	+2 2.3	57.5	.....	-8 23 32.6
	λ Leporis	14.5	15.3	+0.1	69	19	15.0	-0.1	.....	.....	.....	+2 35.1	.....	.....	-13 20 52.2
	β Tauri	22.8	26.8	-0.1	37	32	24.6	-0.1	.....	.....	.....	+0 30.8	58.6	.....	+28 28 2.5
	α Leporis	6.9	9.4	+0.1	73	54	8.3	-0.1	.....	.....	.....	+3 21.7	.....	.....	-17 56 32.1
	52 Orionis	13.8	16.5	+0.1	49	36	15.2	-0.1	.....	.....	.....	+1 9.4	.....	.....	+6 23 33.3
	δ Aurigæ	47.5	49.0	-0.3	18	48	48.0	-0.1	32.0	29.27	33.7	+0 20.1	.....	.....	+37 11 49.8
	A. S. C. 761	4.9	7.5	-0.5	346	39	5.7	0.0	.....	.....	.....	-0 14.1	.....	.....	+69 22 6.2
	Vesta	18.9	21.4	-0.1	32	19	20.1	-0.1	.....	.....	.....	+0 37.4	.....	.....	+23 41 0.4
	(l) 51 (Hev.) Cephei	27.5	30.0	-0.1	328	45	28.6	0.0	.....	.....	.....	-0 36.1	58.1	.....	+87 16 5.3
	(m) δ Ursæ Minoris S. P.	50.0	53.4	+0.1	322	36	51.7	-0.1	.....	.....	.....	-0 45.4	57.6	.....	+86 35 8.4
	(n) Groombridge 1119	12.9	18.1	0.0	326	58	15.6	+0.1	31.5	29.24	33.2	-0 38.6	.....	.....	+89 3 20.7
	κ Geminorum	36.5	37.2	-0.1	31	13	36.8	-0.1	.....	.....	.....	+0 35.8	.....	.....	+24 46 45.3
	6 Cancri	59.5	64.0	-0.1	27	46	1.6	-0.1	.....	.....	.....	+0 31.1	.....	.....	+28 14 25.2
	(o) Moon North L.	38.2	39.7	-0.1	32	6	38.8	+7.5	.....	.....	.....	+0 37.1	.....	.....	+23 53 34.4
	(p)	52.0	54.0	-0.1	32	6	52.8	-5.9	32.0	29.23	33.5	+0 37.1	.....	.....	+23 53 33.8
Jan. 29	16 Orionis	49.8	50.2	+0.1	46	22	50.2	-0.1	23.0	28.90	30.1	+1 2.5	.....	57.3	+9 37 4.7
	β Orionis	25.9	26.3	+0.1	64	22	26.1	-0.1	.....	.....	.....	+2 3.7	56.6	.....	-8 23 32.4
	(q) β Tauri	21.2	24.2	-0.1	27	32	22.5	-0.1	.....	.....	.....	+0 31.1	56.8	.....	+28 28 3.8
	(r) γ Orionis	47.7	50.1	+0.1	49	47	49.1	-0.5	.....	.....	.....	+1 10.5	56.0	.....	+6 11 58.1
	α Orionis	28.5	31.1	+0.1	48	37	30.0	-0.1	.....	.....	.....	+1 7.7	57.6	.....	+7 22 19.7
	η Leporis	20.1	20.7	+0.1	70	10	20.5	-0.1	.....	.....	.....	+2 44.0	.....	.....	-14 12 7.1
	(s) Vesta	41.6	42.7	-0.1	32	16	42.0	-0.1	22.0	28.88	25.0	+0 37.7	.....	.....	+23 43 37.7
	μ Geminorum	48.6	50.7	-0.1	33	24	49.6	-0.1	.....	.....	.....	+0 39.4	59.7	.....	+22 35 28.4
	13 Monocerotis	4.9	6.0	+0.1	48	33	5.7	-0.1	.....	.....	.....	+1 7.6	.....	.....	+7 26 44.1
	δ Geminorum	52.9	55.2	-0.1	33	43	54.0	-0.1	21.2	28.86	23.7	+0 39.9	.....	.....	+22 16 23.5
	δ Cancri	42.9	45.2	0.0	37	15	44.0	-0.1	20.5	28.84	22.4	+0 45.5	.....	.....	+18 44 27.9
	ξ Cancri	46.5	48.0	-0.1	33	18	47.2	-0.1	.....	.....	.....	+0 39.5	.....	.....	+22 41 30.7
	(t) Moon North L.	13.1	15.7	0.0	36	22	14.3	+10.0	.....	.....	.....	+0 44.3	.....	.....	+19 37 48.7
	(u)	33.8	35.0	0.0	36	22	34.3	-11.6	18.4	28.82	20.9	+0 44.3	.....	.....	+19 37 50.3

(a) At Wire IV.

(b) At 6^h 14^m 11^s.(c) At 6^h 15^m 42^s.(d) At 6^h 22^m 22^s.

(e) At Wire V.

(f) At 6^h 45^m 0^s.(g) At 7^h 16^m 18^s.(h) At 7^h 17^m 42^s.(i) At 1^h 0^m 40^s.(k) 36^s after transit.(l) At 6^h 23^m 45^s.(m) At 6^h 25^m 30^s.(n) At 6^h 46^m 30^s.(o) At 8^h 15^m 7^s.(p) At 8^h 16^m 31^s.(q) 24^s before transit.(r) 1^m after transit.(s) 30^s after transit.(t) At 9^h 9^m 35^s.(u) At 9^h 11^m 24^s.

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.			
		I.	II.										observed.	adopted.				
Jan. 30	Sun South L.....	29.2	30.1	+0.1	73	59	29.8	- 0.1	27.7	28.63	29.8	+3 20.7	.....	57.4	- 18	1	53.0
Feb. 1	ζ Cygni.....	23.4	25.2	-0.2	26	26	24.0	- 0.1	32.2	29.77	33.0	+0 29.9	56.9	57.5	+29	34	3.7	
	α Andromedæ.....	15.8	18.9	-0.1	27	48	17.3	- 0.1	33.2	29.75	34.5	+0 31.6	58.9	.....	+28	12	8.7
	(a) α Ursæ Minoris.....	7.8	12.6	-0.1	327	34	10.1	.....	31.9	29.74	33.8	-0 38.4	57.3	.....	+88	27	25.8
	β Orionis.....	24.9	26.4	+0.1	64	22	25.6	- 0.1	31.5	29.73	32.6	+2 4.8	56.9	.....	- 8	23	32.8
Feb. 5	(b) Sun North L.....	52.9	55.2	+0.1	71	43	54.2	- 0.1	40.2	29.60	40.9	+2 56.0	.....	58.0	-15	45	52.1
	β Tauri.....	22.5	26.2	-0.1	27	32	24.1	- 0.1	38.0	29.61	39.2	+0 30.8	58.4	.....	+28	28	3.2
	δ Orionis.....	51.4	54.8	+0.1	56	24	53.2	- 0.1	.....	.....	.....	+1 28.8	58.7	.....	- 0	25	23.9
	ε Orionis.....	59.4	62.2	+0.1	57	18	1.0	- 0.1	.....	.....	.....	+1 31.8	57.7	.....	- 1	18	34.7
	52 Orionis.....	13.5	17.5	+0.1	49	36	15.5	- 0.1	.....	.....	.....	+1 9.4	.....	.....	+ 6	23	33.2
	(c) η Leporis.....	24.5	23.3	+0.1	70	10	24.0	- 0.4	.....	.....	.....	+2 42.5	.....	.....	-14	12	8.1
	A. S. C. 761.....	2.8	6.2	-0.5	346	39	4.1	0.0	.....	.....	.....	-0 14.1	.....	.....	+69	22	8.0
	(d) 46 Aurigæ.....	54.1	57.9	-0.5	6	38	55.6	+ 0.1	37.2	29.63	39.2	+0 6.9	.....	.....	+49	21	55.4
	(e) δ Ursæ Minoris S. P.	48.7	50.9	+0.1	322	36	49.8	- 0.7	.....	.....	.....	-0 45.4	57.4	.....	+86	35	5.7
	13 Monocerotis.....	4.6	7.2	+0.1	48	33	6.1	- 0.1	.....	.....	.....	+1 6.9	.....	.....	+ 7	26	45.1
	A. S. C. 834.....	5.5	9.8	-0.4	338	51	7.2	0.0	.....	.....	.....	-0 23.0	.....	.....	+77	10	13.8
	(f) Groombridge 1119..	10.4	15.2	0.0	326	58	12.9	+ 0.2	.....	.....	.....	-0 38.6	.....	.....	+89	3	23.5
	63 Aurigæ.....	58.5	60.3	-0.1	16	25	58.9	- 0.1	.....	.....	.....	+0 17.4	.....	.....	+39	34	41.8
	1 Canis Minoris.....	12.8	16.0	0.0	44	1	14.3	- 0.1	38.2	29.63	39.4	+0 57.1	.....	.....	+11	58	46.7
	Feb. 6	Sun South L.....	58.5	60.5	+0.1	71	57	59.7	- 0.1	39.9	29.72	40.0	+2 59.2	57.8	-16	0	1.0
		β Cephei.....	57.0	61.5	-0.5	346	9	58.8	0.0	-0 14.6	58.3	+69	51	13.6
α Cassiopeæ.....		30.5	33.8	-0.5	0	21	31.6	0.0	40.3	29.60	40.0	+0 0.3	57.6	.....	+55	39	25.9
(a) α Ursæ Minoris.....		7.2	11.8	-0.1	327	34	9.4	.....	.....	.....	-0 37.5	56.9	.....	+88	27	25.9	
Vesta.....		0.5	3.3	-0.1	31	57	1.7	- 0.1	42.0	29.45	40.8	+0 36.3	.....	.....	+24	3	19.9
μ Geminorum.....		48.8	52.0	-0.1	33	24	50.3	- 0.1	.....	.....	.....	+0 38.4	59.5	.....	+22	35	29.2
(a) δ Ursæ Minoris S. P.		46.0	49.0	+0.1	322	36	47.5	.....	.....	.....	-0 44.7	56.7	.....	+86	35	5.0	
(g) Moon South L.....		40.4	43.3	+0.1	79	55	41.9	+ 3.7	42.5	29.64	42.9	+5 17.8	.....	.....	-24	0	5.6
(h)	58.2	61.9	+0.1	79	56	0.1	-15.7	.....	.....	.....	+5 17.8	.....	.....	-24	0	4.4	
Feb. 7	Sun North L.....	10.0	13.9	+0.1	71	7	11.9	- 0.1	45.4	29.67	42.7	+2 48.5	.....	57.2	-15	9	3.1
	δ Ursæ Minoris S. P.	45.4	49.0	+0.1	322	36	47.2	- 0.3	.....	.....	.....	-0 43.9	57.2	.....	+86	35	5.8
	(i) 51 (Hev.) Cephei.....	20.9	25.2	-0.1	328	45	22.9	+ 1.0	48.1	29.35	45.9	-0 34.9	57.3	.....	+87	16	8.2
Feb. 8	α Arietis.....	16.4	19.8	-0.1	33	18	18.1	- 0.1	47.8	29.37	43.3	+0 37.7	56.2	56.2	.....	.....	.....
Feb. 12	α Arietis.....	15.9	19.2	-0.1	33	18	17.5	- 0.1	39.1	29.70	42.5	+0 38.8	56.4	56.4	.....	.....	.....
Feb. 13	(a) α Ursæ Minoris.....	8.0	13.6	-0.1	327	34	10.7	.....	43.5	29.68	43.7	-0 37.3	57.4	57.2	+88	27	23.8
	α Arietis.....	16.9	20.0	-0.1	33	18	18.4	- 0.1	42.7	29.64	43.6	+0 38.5	56.9	.....	+22	42	0.4
Feb. 15	Sun South L.....	38.8	40.9	+0.1	69	2	40.1	- 0.1	39.4	29.32	40.5	+2 31.0	.....	57.0	-13	4	14.0
	Venus Centre.....	23.9	27.0	+0.1	65	2	25.4	- 0.1	40.0	29.26	41.0	+2 4.2	.....	.....	- 9	3	32.5
	α Pegasi.....	42.2	46.2	0.0	41	39	44.2	- 0.1	.....	.....	.....	+0 51.7	57.3	.....	+14	20	21.2
	γ Cephei.....	4.2	9.8	-0.4	339	17	6.5	0.0	40.3	.....	.....	-0 22.1	56.8	.....	+76	44	12.6
Feb. 18	Sun North L.....	52.3	56.0	+0.1	67	27	54.4	- 0.1	33.0	29.33	36.2	+2 21.6	.....	57.6	-11	29	18.3
	(k) β Pegasi.....	46.5	49.9	-0.1	28	47	48.2	+ 0.1	.....	.....	.....	+0 32.5	57.6	.....	+27	12	36.8
	Venus Centre.....	47.5	47.9	+0.1	63	34	47.8	- 0.1	33.0	29.33	36.0	+1 58.5	.....	.....	- 7	35	48.6
	(l) Moon South L.....	33.2	37.9	0.0	42	10	35.5	- 9.0	.....	.....	.....	+0 53.5	.....	.....	+13	49	37.6
	(m)	13.6	19.0	0.0	42	10	16.3	+13.2	.....	.....	.....	+0 53.5	.....	.....	+13	49	34.6
	α Arietis.....	17.5	20.0	-0.1	33	18	18.7	- 0.1	33.3	29.33	36.5	+0 38.8	57.1	.....	+22	42	0.2
	γ Ceti.....	22.5	25.0	+0.1	53	26	23.8	- 0.1	.....	.....	.....	+1 19.7	.....	.....	+ 2	33	14.2
	α Ceti.....	21.8	25.8	+0.1	52	32	23.8	- 0.1	31.9	29.34	36.6	+1 17.3	58.2	.....	+ 3	27	16.6
Feb. 19	Sun South L.....	0.5	3.9	+0.1	67	39	2.4	- 0.1	32.0	29.32	33.8	+2 23.1	.....	58.5	-11	40	26.9
(a) On meridian.		(d) 36" after transit.		(g) At 15 ^h 19 ^m 0 ^s .		(k) 1 ^m after transit.												
(b) Faint.		(e) At 6 ^h 22 ^m 20 ^s .		(h) At 15 ^h 20 ^m 50 ^s .		(l) At 1 ^h 51 ^m 40 ^s .												
(c) At Wire IV.		(f) At 6 ^h 47 ^m 6 ^s .		(i) At 6 ^h 27 ^m 35 ^s .		(m) At 1 ^h 53 ^m 11 ^s .												

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.										observed.	adopted.	
Feb. 19	(a) Venus Centre	10.0	11.0	+0.1	63	5	10.6	- 0.1	32.9	29.31	34.2	+ 1 56.0	.....	58.5	- 7 6 8.0
	(b) Moon South L.	22.2	24.0	0.0	36	20	23.1	+ 1.2	.....	.....	.....	+ 0 43.4	.....	.....	+ 19 39 50.8
	α Ceti.....	23.7	25.6	+0.1	52	32	24.6	- 0.1	32.8	29.27	35.0	+ 1 16.9	58.5	.....	.....
Feb. 22	Sun North L.	8.0	11.0	+0.1	66	2	9.5	- 0.1	40.3	29.12	39.6	+ 2 9.2	.....	57.3	- 10 3 21.3
	(c) β Tauri.....	21.5	24.9	-0.1	27	32	23.0	+ 0.2	38.0	29.11	38.7	+ 0 30.3	57.3	.....	+ 28 28 3.8
	δ Orionis	53.0	56.8	+0.1	56	24	55.0	- 0.1	.....	.....	.....	+ 1 27.3	58.0	.....	- 0 25 24.9
	ε Orionis.....	0.8	4.0	+0.1	57	18	2.6	- 0.1	.....	.....	.....	+ 1 30.2	56.7	.....	- 1 18 35.4
	136 Tauri.....	11.0	16.8	-0.1	28	26	13.7	- 0.1	.....	.....	.....	+ 0 31.4	.....	.....	+ 27 34 12.3
	(d) Moon South L.	58.9	64.2	-0.1	28	1	1.4	+ 0.9	.....	.....	.....	+ 0 30.9	.....	.....	+ 27 59 24.1
	(e) Moon North L.	14.1	20.2	-0.2	27	29	17.0	0.0	.....	.....	.....	+ 0 30.2	.....	.....	+ 28 31 10.1
	(f) Vesta	11.7	14.6	-0.1	31	23	13.1	- 0.2	.....	.....	.....	+ 0 35.4	.....	.....	+ 24 37 9.0
	(g) α Aurigæ	14.8	18.7	-0.2	26	27	16.4	- 0.1	38.0	29.09	39.0	+ 0 28.9	.....	.....	+ 29 33 12.1
	(h) δ Ursæ Minoris S. P.	42.2	45.9	+0.1	322	36	44.1	.....	.....	.....	.....	- 0 44.5	57.2	.....	+ 86 35 2.3
ε Geminorum	12.3	14.8	-0.1	30	43	13.5	- 0.1	.....	.....	.....	+ 0 34.5	.....	.....	+ 25 17 9.4	
Feb. 23	Sun South L.	35.9	38.4	+0.1	66	12	37.4	- 0.1	41.2	29.07	40.8	+ 2 9.8	.....	57.4	- 10 13 49.7
	(h) α Ursæ Minoris	8.9	13.9	-0.1	327	34	11.3	.....	40.2	29.09	40.8	- 0 36.9	56.4	.....	+ 88 27 23.0
	α Arietis.....	16.3	20.8	-0.1	33	18	18.5	- 0.1	.....	.....	.....	+ 0 38.0	55.7	.....	+ 22 42 1.0
	α Ceti.....	22.4	25.5	+0.1	52	32	23.9	- 0.1	38.8	29.11	40.0	+ 1 15.5	56.3	.....	+ 3 27 18.1
	η Leporis	25.7	26.2	+0.1	70	10	26.0	- 0.1	36.8	29.14	38.2	+ 2 40.1	.....	.....	- 14 12 8.6
	Vesta.....	19.2	21.9	-0.1	31	21	20.4	- 0.1	.....	.....	.....	+ 0 35.5	.....	.....	+ 24 39 1.6
	(i) τ Leporis	28.4	32.1	+0.1	75	6	30.3	- 0.9	.....	.....	.....	+ 3 35.5	.....	.....	- 19 9 7.5
	α Aurigæ	16.0	19.3	-0.2	26	27	17.3	- 0.1	.....	.....	.....	+ 0 29.0	.....	.....	+ 29 33 11.2
	μ Geminorum	48.8	51.9	-0.1	33	24	50.3	- 0.1	.....	.....	.....	+ 0 38.5	59.9	.....	+ 22 35 28.7
	(k) δ Ursæ Minoris S. P.	43.2	46.8	+0.1	322	36	45.0	- 1.2	.....	.....	.....	- 0 44.8	56.8	.....	+ 86 35 1.6
	13 Monocerotis	6.3	8.8	+0.1	48	33	7.8	- 0.1	.....	.....	.....	+ 1 6.0	.....	.....	+ 7 26 43.7
	ε Geminorum	12.8	14.8	-0.1	30	43	13.8	- 0.1	.....	.....	.....	+ 0 34.7	.....	.....	+ 25 17 9.0
	A. S. C. 834.....	1.0	5.4	-0.4	338	51	2.7	0.0	.....	.....	.....	- 0 22.7	.....	.....	+ 77 10 17.4
	(l) Groombridge 1119....	6.1	11.5	0.0	326	58	8.9	+ 0.2	36.0	29.15	37.6	- 0 38.1	.....	.....	+ 89 3 26.4
	(m) Moon North L.	31.8	34.5	-0.1	28	20	33.0	+ 4.2	.....	.....	.....	+ 0 31.5	.....	.....	+ 27 39 48.7
	(n)	37.0	39.8	-0.1	28	20	38.3	- 2.4	.....	.....	.....	+ 0 31.5	.....	.....	+ 27 39 50.0
	(o) 63 Aurigæ	56.8	59.0	-0.4	16	25	57.4	- 0.1	.....	.....	.....	+ 0 17.2	.....	.....	+ 39 34 42.9
	ι Geminorum	37.4	40.0	-0.1	27	53	38.7	- 0.1	.....	.....	.....	+ 0 30.9	.....	.....	+ 28 6 47.9
	δ² Canis Minoris	59.0	62.2	+0.1	52	22	0.6	- 0.1	.....	.....	.....	+ 1 15.6	.....	.....	+ 3 37 41.3
	β Geminorum	47.3	53.0	-0.1	27	35	50.0	- 0.1	.....	.....	.....	+ 0 30.5	58.4	.....	+ 28 24 37.0
	π Canis Minoris	39.2	42.3	0.0	44	50	40.7	- 0.1	.....	.....	.....	+ 0 58.0	.....	.....	+ 11 9 18.8
	14 Canis Minoris.....	44.0	44.5	+0.1	53	20	44.3	- 0.1	.....	.....	.....	+ 1 18.3	.....	.....	+ 2 38 54.9
	29 Monocerotis.....	34.6	36.1	+0.1	58	30	35.4	- 0.1	.....	.....	.....	+ 1 35.1	.....	.....	- 2 31 13.0
	(h) λ Ursæ Minoris S. P.	55.4	60.9	0.0	324	50	58.1	.....	36.5	29.17	37.6	- 0 41.3	58.1	.....	+ 88 49 19.4
	Feb. 24	(g) 63 Aurigæ	56.4	58.1	-0.4	16	25	56.8	0.0	+ 0 17.2	58.6	+ 39 34 44.6
δ Geminorum		52.8	55.0	-0.1	33	43	53.9	- 0.1	.....	.....	.....	+ 0 39.1	59.1	.....	+ 22 16 25.7
ι Geminorum		37.6	41.1	-0.1	27	53	39.3	- 0.1	34.9	29.13	36.8	+ 0 30.9	.....	.....	+ 28 6 48.5
δ² Canis Minoris.....		0.8	3.5	+0.1	52	22	2.1	- 0.1	.....	.....	.....	+ 1 15.8	.....	.....	+ 3 37 40.8
α Canis Minoris.....		49.6	52.0	+0.1	50	21	50.8	- 0.1	.....	.....	.....	+ 1 10.6	58.3	.....	+ 5 37 57.3
β Geminorum		48.8	52.0	-0.1	27	35	50.3	- 0.1	.....	.....	.....	+ 0 30.6	58.9	.....	+ 28 24 37.8
(f) π Canis Minoris		40.0	42.8	0.0	44	50	41.4	- 0.2	.....	.....	.....	+ 0 58.2	.....	.....	+ 11 9 19.2
14 Canis Minoris.....		43.5	44.1	+0.1	53	20	43.9	- 0.1	.....	.....	.....	+ 1 18.5	.....	.....	+ 2 38 56.3
(p) Moon North L.		40.8	42.1	-0.1	30	50	41.3	+ 6.0	.....	.....	.....	+ 0 35.0	.....	.....	+ 25 9 36.3
(q)		51.9	53.5	-0.1	30	50	52.6	- 3.5	.....	.....	.....	+ 0 35.0	.....	.....	+ 25 9 34.5
29 Monocerotis.....		34.5	36.2	+0.1	58	30	35.4	- 0.1	.....	.....	.....	+ 1 35.3	.....	.....	- 2 31 12.0
λ Cancri		53.4	55.7	-0.1	31	28	54.5	- 0.1	.....	.....	.....	+ 0 35.9	.....	.....	+ 24 31 28.3
22 Argûs		3.2	6.1	+0.1	68	31	4.7	- 0.1	.....	.....	.....	+ 2 27.7	.....	.....	- 12 32 33.7
(h) λ Ursæ Minoris S. P.		55.8	60.1	0.0	324	50	57.9	.....	.....	.....	.....	- 0 41.4	58.1	.....	+ 88 49 17.9
A. S. C. 1041.....	41.4	43.1	+0.1	74	59	42.2	- 0.1	.....	.....	.....	+ 3 34.9	.....	.....	- 19 2 18.4	
(a) Faint.		subtracted from apparent			(g) 40° after transit.			(m) At 6 ^h 56 ^m 10 ^s .							
(b) Faint. At 2 ^h 49 ^m 48 ^s .		Declination observed for			(h) On meridian.			(n) At 6 ^h 57 ^m 30 ^s .							
(c) 1 ^m after transit.		defect of illuminated disc.			(i) At Wire V.			(o) 20 ^s after transit.							
(d) At 5 ^h 54 ^m 0 ^s . Not fully enlightened; 0 ^o .4 to be		(e) At 5 ^h 55 ^m 32 ^s .			(k) At 6 ^h 21 ^m 0 ^s .			(p) At 7 ^h 55 ^m 23 ^s .							
		(f) At Wire IV.			(l) At 6 ^h 46 ^m 20 ^s .			(q) At 7 ^h 56 ^m 30 ^s .							

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.		observed.	adopted.									
Feb. 24	γ Cancr	42.1	43.9	-0.1	33	57	43.0	-0.1	34.0	29.12	35.7	+0 39.5	.....	58.6	+22 2 36.2
Feb. 25	Sun North L.	11.5	14.5	+0.1	64	56	13.0	-0.1	38.7	29.25	38.7	+2 3.9	.....	57.3	-8 57 19.5
	(a) β Pegasi	48.0	52.5	-0.1	28	47	50.3	-0.1	.....	.....	.....	+0 32.0	57.8	.....	+27 12 35.1
	γ Cephei	8.0	12.5	-0.4	339	17	9.7	0.0	.....	.....	.....	-0 22.1	57.2	.....	+76 44 9.7
	Venus Centre	58.2	61.0	+0.1	60	3	59.8	-0.1	39.9	29.27	40.0	+1 40.6	.....	.....	-4 4 43.4
	(b) α Ursæ Minoris	50.3	54.0	-0.1	327	33	52.1	+20.7	.....	.....	.....	-0 37.2	57.3	.....	+88 27 21.7
	(c)	7.7	12.0	-0.1	327	34	9.8	+3.7	39.1	29.31	40.0	-0 37.2	.....	.....	+88 27 21.0
	(d)	37.0	40.6	-0.1	327	33	38.8	+33.8	.....	.....	.....	-0 37.2	.....	.....	+88 27 21.9
	α Arietis	17.4	20.7	-0.1	33	18	19.0	-0.1	39.8	29.35	40.0	+0 38.3	56.3	.....	+22 42 0.1
	Vesta	38.2	41.0	-0.1	31	17	39.6	-0.1	37.0	29.49	38.2	+0 35.8	.....	.....	+24 42 42.0
	(e) 46 Aurigæ	51.5	55.0	-0.5	6	38	52.8	+0.2	.....	.....	.....	+0 6.8	.....	.....	+49 21 57.5
	(f) δ Ursæ Minoris S. P.	48.0	51.9	+0.1	322	36	49.9	-5.1	.....	.....	.....	-0 45.3	57.5	.....	+86 35 2.2
	.....	43.0	46.5	+0.1	322	36	44.8	-0.3	.....	.....	.....	-0 45.3	.....	.....	+86 35 1.9
	(g)	44.0	47.0	+0.1	322	36	45.5	-1.4	.....	.....	.....	-0 45.3	.....	.....	+86 35 1.5
	(h)	52.0	55.7	+0.1	322	36	53.8	-8.7	.....	.....	.....	-0 45.3	.....	.....	+86 35 2.5
	A. S. C. 834	1.5	5.8	-0.4	338	51	3.2	0.0	.....	.....	.....	-0 23.0	.....	.....	+77 10 17.1
	π^3 Canis Majoris	18.8	20.9	+0.1	75	53	20.0	-0.1	.....	.....	.....	+3 50.4	.....	.....	-19 56 13.0
	(i) 20 Monocerotis	44.7	46.2	+0.1	59	58	45.6	-1.0	36.3	29.51	37.6	+1 41.9	.....	.....	-3 59 29.2
	1 Canis Minoris	12.2	15.7	0.0	44	1	13.9	-0.1	.....	.....	.....	+0 57.1	.....	.....	+11 58 46.4
	δ^2 Canis Minoris	59.0	62.4	+0.1	52	22	0.7	-0.1	.....	.....	.....	+1 16.6	.....	.....	+3 37 40.1
	π Canis Minoris	38.2	41.5	0.0	44	50	39.8	-0.1	.....	.....	.....	+0 58.8	.....	.....	+11 9 18.8
	14 Canis Minoris	41.9	43.5	+0.1	53	20	42.8	-0.1	36.0	29.53	37.4	+1 19.3	.....	.....	+2 38 55.3
	(k) λ Ursæ Minoris S. P.	7.8	13.6	0.0	324	51	10.6	-13.5	.....	.....	.....	-0 41.9	57.6	.....	+88 49 17.9
	.....	55.5	61.9	0.0	324	50	58.6	-0.7	.....	.....	.....	-0 41.9	.....	.....	+88 49 18.7
	(l)	59.6	65.0	0.0	324	51	2.2	-4.4	.....	.....	.....	-0 41.9	.....	.....	+88 49 18.6
	(m) γ Cancr	42.3	44.0	-0.1	33	57	43.2	-0.2	.....	.....	.....	+0 39.9	.....	.....	+22 2 34.4
	(n) λ Ursæ Minoris S. P.	21.0	26.4	0.0	324	51	23.6	-26.1	.....	.....	.....	-0 41.9	.....	.....	+88 49 18.3
	(o) Moon North L.	49.4	51.9	0.0	34	40	50.6	+9.1	.....	.....	.....	+0 41.0	.....	.....	+21 19 16.6
	(p)	4.1	6.5	0.0	34	41	5.2	-5.6	35.0	29.54	36.7	+0 41.0	.....	.....	+21 19 16.7
	λ Leonis	54.2	58.9	-0.1	32	19	56.5	-0.1	.....	.....	.....	+0 37.6	.....	.....	+23 40 23.3
	ϕ Leonis	43.3	46.2	+0.1	45	22	45.0	-0.1	34.7	29.56	36.5	+1 0.1	.....	.....	+10 37 12.3
Feb. 26	Sun South L.	7.8	11.0	+0.1	65	6	9.4	-0.1	39.5	29.50	39.0	+2 5.7	.....	56.8	-9 7 18.2
	(m) β Pegasi	47.9	50.9	-0.1	28	47	49.4	-0.1	.....	.....	.....	+0 32.2	56.9	.....	+27 12 35.3
	α Canis Majoris	57.9	62.0	+0.1	72	28	0.2	-0.1	39.2	29.33	40.2	+3 2.4	57.3	.....	-16 30 5.7
	(m) π^3 Canis Majoris	22.9	25.2	+0.1	75	53	24.2	-0.4	.....	.....	.....	+3 47.6	.....	.....	-19 56 14.6
	(q) 20 Monocerotis	45.5	47.1	+0.1	59	58	46.5	-0.9	.....	.....	.....	+1 40.6	.....	.....	-3 59 29.1
	1 Canis Minoris	12.6	17.1	0.0	44	1	14.8	-0.1	.....	.....	.....	+0 56.3	.....	.....	+11 58 45.8
	δ^3 Canis Minoris	44.8	47.4	+0.1	52	16	46.1	-0.1	.....	.....	.....	+1 15.3	.....	.....	+3 42 55.5
	α Canis Minoris	48.0	51.0	+0.1	50	21	49.5	-0.1	.....	.....	.....	+1 10.3	56.7	.....	+5 37 57.1
	4 Argûs	58.8	60.8	+0.1	70	9	0.0	-0.1	39.2	29.30	40.2	+2 40.0	.....	.....	-14 10 43.1
	(r) λ Ursæ Minoris S. P.	31.0	35.3	0.0	324	51	33.1	-37.7	.....	.....	.....	-0 41.2	56.4	.....	+88 49 17.4
	28 Monocerotis	30.4	32.8	+0.1	56	56	31.6	-0.1	.....	.....	.....	+1 29.4	.....	.....	-0 57 4.1
	(s) λ Ursæ Minoris S. P.	7.8	13.5	0.0	324	51	10.6	-14.5	.....	.....	.....	-0 41.2	.....	.....	+88 49 18.1
	.....	53.0	59.8	0.0	324	50	56.3	-0.7	.....	.....	.....	-0 41.2	.....	.....	+88 49 17.6
	(t)	56.1	62.9	0.0	324	50	59.4	-4.5	.....	.....	.....	-0 41.2	.....	.....	+88 49 16.9
	ϕ Leonis	43.5	46.5	+0.1	45	22	45.2	-0.1	39.0	29.28	40.0	+0 59.0	.....	.....	+10 37 12.7
	(u) Moon North L.	56.1	60.9	0.0	39	29	58.5	+6.0	.....	.....	.....	+0 48.0	.....	.....	+16 30 4.3
	(x)	12.5	16.8	0.0	39	30	14.6	-10.4	.....	.....	.....	+0 48.0	.....	.....	+16 30 4.6
Feb. 27	Sun North L.	29.8	31.2	+0.1	64	11	30.5	-0.1	35.8	29.21	38.8	+2 0.4	.....	57.3	-8 12 33.5
	(y) β Pegasi	47.9	50.8	-0.1	28	47	49.4	-0.1	.....	.....	.....	+0 32.1	56.7	.....	+27 12 35.9
	γ Cephei	8.9	13.2	-0.4	339	17	10.5	0.0	.....	.....	.....	-0 22.2	57.3	.....	+76 44 9.0
	Venus Centre	33.9	36.0	+0.1	59	2	35.2	-0.1	38.8	29.23	39.4	+1 36.7	.....	.....	-3 3 14.5
	α Andromedæ	19.1	23.6	-0.1	27	48	21.3	-0.1	.....	.....	.....	+0 30.7	58.1	.....	+28 12 5.4
(a) 15 ^s after transit. (f) At 6 ^h 17 ^m 41 ^s . (l) At 8 ^h 31 ^m 56 ^s . (p) At 8 ^h 51 ^m 40 ^s . (r) At 8 ^h 32 ^m 1 ^s .															
(b) At 0 ^h 41 ^m 30 ^s . (g) At 6 ^h 27 ^m 49 ^s . (m) At Wire IV. (q) 1 ^m after transit. (u) At 9 ^h 41 ^m 43 ^s .															
(c) At 0 ^h 52 ^m 56 ^s . (h) At 6 ^h 32 ^m 58 ^s . (n) At 8 ^h 46 ^m 54 ^s . (r) At 7 ^h 50 ^m 55 ^s . (x) At 9 ^h 42 ^m 59 ^s .															
(d) At 1 ^h 26 ^m 37 ^s . (i) At 7 ^h 3 ^m 30 ^s . (o) At 8 ^h 50 ^m 22 ^s . (s) At 8 ^h 2 ^m 31 ^s .															
(e) 45 ^s after transit. (k) At 8 ^h 3 ^m 8 ^s .															

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.	
		I.	II.								observed.	adopted.		
Feb. 27	(a) α Ursæ Minoris	42.4	47.5	-0.1	327 33 44.9	+28.6	.....	.....	.....	-0 37.2	57.7	57.3	+88 27 21.0
	(b)	6.7	11.0	-0.1	327 34 8.8	+5.1	.....	.....	.....	-0 37.2	.....	.....	+88 27 20.6
	(c)	11.0	16.2	-0.1	327 34 13.5	.....	.....	.....	.....	-0 37.2	.....	.....	+88 27 21.0
	(d)	6.4	10.8	-0.1	327 34 8.5	+6.2	.....	.....	.....	-0 37.2	.....	.....	+88 27 19.8
	(e)	39.5	43.9	-0.1	327 33 41.7	+32.0	38.6	29.23	39.8	-0 37.2	.....	.....	+88 27 20.8
	(f) Vesta	4.1	6.4	-0.1	31 14 5.2	-0.1	35.0	29.36	37.8	+0 35.7	.....	.....	+24 46 16.5
	46 Aurigæ	52.2	56.0	-0.5	6 38 53.7	0.0	.....	.....	.....	+0 6.8	.....	.....	+49 21 56.8
	(g) δ Ursæ Minoris S. P.	43.5	45.9	+0.1	322 36 44.7	-1.5	.....	.....	.....	-0 45.2	56.5	.....	+86 35 0.7
	A. S. C. 816	43.9	46.3	+0.1	73 54 45.2	-0.1	.....	.....	.....	+3 21.5	.....	.....	-17 57 9.3
	43 Camelopardi	2.5	6.7	-0.5	346 57 4.0	0.0	.....	.....	.....	-0 13.8	.....	.....	+69 4 7.1
	π^3 Canis Majoris	19.2	20.9	+0.1	75 53 20.2	-0.1	.....	.....	.....	+3 50.3	.....	.....	-19 56 13.1
	(h) 20 Monocerotis	42.5	44.9	+0.1	59 58 43.9	-0.6	35.0	29.40	37.6	+1 41.8	.....	.....	-3 59 27.8
	ϵ Canis Minoris	37.1	38.5	+0.1	46 24 37.9	-0.1	.....	.....	.....	+1 2.0	.....	.....	+9 35 17.5
	δ^3 Canis Minoris	44.5	46.9	+0.1	52 16 45.7	-0.1	.....	.....	.....	+1 16.2	.....	.....	+3 42 55.5
	4 Argus	55.1	56.9	+0.1	70 8 56.2	-0.1	.....	.....	.....	+2 42.0	.....	.....	-14 10 40.8
	(i) λ Ursæ Minoris S. P.	55.2	60.0	0.0	324 51 57.5	-61.4	.....	.....	.....	-0 41.8	57.0	.....	+88 49 17.0
	(k) 28 Monocerotis	30.9	32.2	+0.1	56 56 31.6	-0.3	.....	.....	.....	+1 30.6	.....	.....	-0 57 4.6
	(h) 29 Monocerotis	33.9	36.0	+0.1	58 30 35.0	-0.3	34.9	29.42	37.5	+1 36.2	.....	.....	-2 31 13.6
	(l) λ Ursæ Minoris S. P.	54.9	59.9	0.0	324 50 57.4	-0.5	.....	.....	.....	-0 41.8	.....	.....	+88 49 17.8
	(k) A. S. C. 1041	38.5	40.9	+0.1	74 59 39.8	-0.4	.....	.....	.....	+3 36.8	.....	.....	-19 2 18.9
	ι Cancri	47.2	49.2	-0.2	26 39 48.0	-0.1	.....	.....	.....	+0 29.7	.....	.....	+29 20 39.7
	(m) A. S. C. 1099	25.6	29.5	-0.5	8 13 27.1	0.6	.....	.....	.....	+0 8.5	.....	.....	+47 47 21.7
	(n) λ Ursæ Minoris S. P.	42.5	46.0	0.0	324 51 44.2	-48.1	.....	.....	.....	-0 41.8	.....	.....	+88 49 17.0
	20 Hydræ	16.9	17.1	+0.1	64 7 17.0	-0.1	35.1	29.45	37.4	+2 1.3	.....	.....	-8 8 20.9
	(h) 26 Hydræ	37.1	39.7	+0.1	67 16 38.4	-0.7	.....	.....	.....	+2 20.3	.....	.....	-11 18 0.7
	10 Leonis Minoris	6.8	9.0	-0.3	18 54 7.6	-0.1	.....	.....	.....	+0 20.2	.....	.....	+37 6 29.6
	Groomb. 3548 S. P.	2.5	6.5	+0.1	322 23 4.7	-0.2	.....	.....	.....	-0 45.8	.....	.....	+86 21 21.4
	ν Ursæ Majoris	28.9	30.9	-0.6	356 13 29.4	0.0	.....	.....	.....	-0 4.0	.....	.....	+59 47 31.9
	A. S. C. 1199	56.0	59.4	+0.1	68 29 57.8	-0.1	.....	.....	.....	+2 29.0	.....	.....	-12 31 29.4
	α Leonis	1.9	3.9	0.0	43 15 2.9	-0.1	.....	.....	.....	+0 55.6	57.8	.....	+12 44 58.9
	17 Sextantis	15.6	16.2	+0.1	63 36 15.9	-0.1	35.0	29.47	37.2	+1 58.7	.....	.....	-7 37 17.2
	(o) Groombridge 1620 *	39.5	43.0	-0.1	330 57 41.0	+0.3	.....	.....	.....	-0 33.0	.....	.....	+85 3 49.0
	γ Leonis	8.1	11.0	0.0	35 21 9.5	-0.1	.....	.....	.....	+0 43.6	.....	.....	+20 39 4.3
	(p) Moon North L.	0.7	4.5	0.0	44 58 2.7	+12.2	.....	.....	.....	+0 59.1	.....	.....	+11 1 43.3
	(q)	18.0	23.1	0.0	44 58 20.6	-8.5	.....	.....	.....	+0 59.1	.....	.....	+11 1 46.1
	χ Leonis	43.2	44.4	+0.1	47 47 44.0	-0.1	35.1	29.50	37.1	+1 5.2	.....	.....	+8 12 8.2
	ν Virginis	7.4	10.0	+0.1	48 34 8.8	-0.1	.....	.....	.....	+1 7.1	.....	.....	+7 25 41.5
	β Leonis	58.6	61.5	0.0	40 31 59.9	-0.1	.....	.....	.....	+0 50.7	57.1	.....	+15 28 6.8
	Mars North L.	4.5	7.1	+0.1	50 35 5.9	-0.1	.....	.....	.....	+1 12.0	.....	.....	+5 24 39.5
	* R. A. 11 ^h 59 ^m 20 ^s	19.8	21.8	+0.1	50 35 20.9	-0.1	35.1	29.53	37.2	+1 12.0	.....	.....	+5 24 24.5
	Feb. 28	(r) 53 Leonis	23.9	27.5	0.0	44 36 25.6	-0.3	43.0	29.41	42.0	+0 57.2	57.5	+11 23 35.0
		δ Leonis	7.2	12.0	0.0	34 36 9.5	-0.1	+0 40.0	57.1	+21 24 8.1
		(s) δ Hydræ & Crateris	57.7	59.1	+0.1	69 52 58.6	+0.3	+2 36.9	58.7	-13 54 38.3
		(t) Moon South L.	23.8	27.6	+0.1	51 18 25.9	+9.3	+1 12.3	+4 41 10.0
		(u)	40.4	45.2	+0.1	51 18 43.0	-11.5	+1 12.3	+4 41 13.7
ν Leonis		48.0	51.4	+0.1	55 55 49.8	-0.1	.....	.....	.....	+1 25.5	.....	.....	+0 3 42.3
ν Virginis		9.8	12.1	+0.1	48 34 11.1	-0.1	.....	.....	.....	+1 5.6	.....	.....	+7 25 40.9
β Leonis		58.4	62.8	0.0	40 32 0.5	-0.1	.....	.....	.....	+0 49.6	56.6	.....	+15 28 7.5
(r) β Virginis	30.4	32.9	+0.1	53 19 31.8	-0.5	.....	.....	.....	+1 17.7	.....	.....	+2 40 8.5	
Mars South L.	17.4	20.3	+0.1	50 27 18.8	-0.1	43.2	29.39	42.8	+1 10.1	.....	.....	+5 32 28.7	
Mar. 1	(x) Sun South L.	35.5	36.5	+0.1	63 58 36.2	-0.1	47.8	29.24	44.4	+1 56.4	.....	56.8	-7 59 35.7
Mar. 2	(y) α Ursæ Minoris	56.5	61.0	-0.1	327 33 58.7	+14.3	45.0	29.56	44.9	-0 37.1	56.2	56.2	+88 27 20.3	
	α Arietis	16.5	20.8	-0.1	33 18 18.6	-0.1	45.0	29.58	45.3	+0 38.2	55.4	.....	+22 41 59.5
(a) At 0 ^h 38 ^m 5 ^s . (f) 30 ^s after transit. (l) At 8 ^h 18 ^m 0 ^s . (p) At 10 ^h 28 ^m 54 ^s . (t) At 11 ^h 14 ^m 10 ^s .														
(b) At 0 ^h 51 ^m 30 ^s . (g) At 6 ^h 20 ^m 46 ^s . (m) 24 ^s after transit. (q) At 10 ^h 30 ^m 20 ^s . (u) At 11 ^h 15 ^m 33 ^s .														
(c) On meridian. (h) 40 ^s after transit. (n) At 8 ^h 56 ^m 5 ^s . (r) At Wire V. (x) Tremulous.														
(d) At 1 ^h 12 ^m 15 ^s . (i) At 7 ^h 42 ^m 30 ^s . (o) At 10 ^h 7 ^m 18 ^s . (s) At Wire I. (y) At 1 ^h 17 ^m 50 ^s .														
(e) At 1 ^h 26 ^m 0 ^s . (k) At Wire IV.														

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.	
		I.	II.								observed.	adopted.		
Mar. 2	22 Monocerotis.....	21.6	25.1	+0.1	56 13 23.5	- 0.1	40.2	<i>In.</i> 29.70	42.4	+1 27.9	.....	56.2	- 0 13 55.1
	(a) δ Geminorum.....	47.9	52.5	-0.1	33 43 50.2	- 0.1	.....	.....	.....	+0 39.4	55.9	.....	+22 16 26.7
	ϵ Canis Minoris.....	35.8	37.5	+0.1	46 24 36.8	- 0.1	.....	.....	.....	+1 1.9	.....	.....	+ 9 35 17.6
	α Geminorum follow.	16.7	20.6	-0.2	23 46 18.4	- 0.1	.....	.....	.....	+0 26.0	56.3	.....	+32 14 11.9
	δ^s Canis Minoris.....	43.0	45.2	+0.1	52 16 44.1	- 0.1	.....	.....	.....	+1 16.1	.....	.....	+ 3 42 56.1
	(b) 4 Argûs.....	57.7	59.4	+0.1	70 8 58.7	- 1.2	.....	.....	.....	+2 41.8	.....	.....	-14 10 43.1
	(b) 16 Argûs.....	7.8	11.6	+0.1	74 44 9.8	- 1.3	40.4	29.72	41.5	+3 32.6	.....	.....	-18 46 44.9
	(b) 22 Argûs.....	1.0	3.8	+0.1	68 31 2.4	- 1.1	.....	.....	.....	+2 28.7	.....	.....	-12 32 33.8
	γ Cancri.....	46.8	48.9	-0.2	26 39 47.7	- 0.1	.....	.....	.....	+0 29.6	.....	.....	+29 20 39.0
	Groomb. 3402 S. P.	56.0	59.8	0.0	324 38 58.0	- 0.5	.....	.....	.....	-0 42.0	.....	.....	+88 37 19.3
	(c) A. S. C. 1099.....	25.8	29.1	-0.5	8 13 27.0	0.0	.....	.....	.....	+0 8.5	.....	.....	+47 47 20.7
	20 Hydræ.....	17.8	19.0	+0.1	64 7 18.4	- 0.1	40.5	29.73	41.5	+2 1.0	.....	.....	- 8 8 23.1
	(d) 26 Hydræ.....	37.8	39.1	+0.1	67 16 38.5	- 0.7	.....	.....	.....	+2 20.0	.....	.....	-11 18 1.6
	10 Leonis Minoris....	7.0	9.8	-0.3	18 54 8.1	- 0.1	.....	.....	.....	+0 20.2	.....	.....	+37 6 28.0
	(e) Groomb. 3548 S. P.	2.0	6.0	+0.1	322 23 4.2	- 0.4	.....	.....	.....	-0 45.7	.....	.....	+86 21 21.9
	ν Ursæ Majoris.....	27.5	30.3	-0.6	356 13 28.4	0.0	.....	.....	.....	-0 4.0	.....	.....	+59 47 31.8
	A. S. C. 1199.....	57.9	62.0	+0.1	68 30 0.1	- 0.1	.....	.....	.....	+2 29.0	.....	.....	-12 31 32.8
	(f) Groombridge 1620...	37.4	42.0	-0.1	330 57 39.7	.....	39.3	29.75	41.4	-0 33.0	.....	.....	+85 3 49.5
	μ Ursæ Majoris.....	20.2	24.2	-0.4	13 42 21.7	- 0.1	.....	.....	.....	+0 14.4	.....	.....	+42 18 20.2
	37 Ursæ Majoris.....	27.4	31.1	-0.6	358 6 28.6	0.0	.....	.....	.....	-0 2.0	.....	.....	+57 54 29.6
	(g) α Hydræ & Crateris	21.0	23.5	+0.1	73 24 22.4	- 0.3	.....	.....	.....	+3 16.0	.....	.....	-17 26 41.9
	(d) 67 Leonis.....	45.5	49.0	-0.1	30 28 47.2	- 0.1	39.1	29.76	41.2	+0 34.8	.....	.....	+25 31 34.3
	(h) Groomb. 4101 S. P.	56.2	61.0	+0.1	322 26 58.6	- 0.1	.....	.....	.....	-0 45.7	.....	.....	+86 25 16.6
	ν Virginis.....	8.5	10.7	+0.1	48 34 9.7	- 0.1	.....	.....	.....	+1 7.1	.....	.....	+ 7 25 39.5
	β Leonis.....	58.0	61.8	0.0	40 31 59.8	- 0.1	.....	.....	.....	+0 50.7	57.0	.....	+15 28 5.8
	Mars South L.....	44.4	48.0	+0.1	50 10 46.3	- 0.1	38.5	29.75	41.2	+1 11.0	.....	.....	+ 5 48 59.0
Mar. 4	Sun North L.....	43.8	43.9	+0.1	62 17 44.1	- 0.1	40.0	29.84	40.8	+1 52.4	.....	57.5	- 6 18 38.9
	γ Cephei.....	8.9	14.0	-0.4	339 17 10.9	0.0	.....	.....	.....	-0 22.5	55.9	.....	+76 44 9.1
	α Andromedæ.....	19.7	24.7	-0.1	27 48 22.5	- 0.1	.....	.....	.....	+0 31.2	59.0	.....	+28 12 3.9
	Venus Centre.....	45.0	47.3	+0.1	56 27 46.4	- 0.1	40.9	29.83	41.2	+1 29.0	.....	.....	- 0 28 17.8
	(i) α Ursæ Minoris.....	51.6	56.8	-0.1	327 32 54.2	+82.1	.....	.....	.....	-0 37.8	58.4	.....	+88 27 19.0
	(k).....	4.9	9.2	-0.1	327 34 7.0	+10.1	40.0	29.83	41.0	-0 37.8	.....	.....	+88 27 18.2
	(l).....	42.6	46.2	-0.1	327 32 44.4	+91.4	.....	.....	.....	-0 37.8	.....	.....	+88 27 19.5
	α Ceti.....	20.9	24.8	+0.1	52 32 22.8	- 0.1	39.3	29.84	40.5	+1 17.3	56.8	.....	+ 3 27 17.5
Mar. 5	α Geminorum follow.	17.2	20.7	-0.2	23 46 18.7	- 0.1	32.8	29.95	38.5	+0 26.6	57.4	57.1	+32 14 11.9	
	(m) 25 Monocerotis.....	40.2	41.0	+0.1	59 44 40.7	- 0.4	.....	.....	.....	+1 43.3	.....	.....	- 3 45 26.5
	(c) α Canis Minoris.....	45.0	47.4	+0.1	50 21 46.2	- 0.3	.....	.....	.....	+1 12.8	55.4	.....	+ 5 37 58.4
	β Geminorum.....	46.1	50.9	-0.1	27 35 48.4	- 0.1	.....	.....	.....	+0 31.6	58.6	.....	+28 24 37.2
	6 Argûs.....	11.0	13.4	+0.1	72 47 12.2	- 0.1	.....	.....	.....	+3 12.7	.....	.....	-16 49 27.7
	(m) 28 Monocerotis.....	28.1	30.9	+0.1	56 56 29.5	- 0.4	.....	.....	.....	+1 32.7	.....	.....	- 0 57 4.7
	(n) 16 Argûs.....	1.9	4.0	+0.1	74 44 3.1	+ 0.2	32.1	29.94	36.3	+3 38.1	.....	.....	-18 46 44.3
	(f) Groomb. 4101 S. P.	57.1	61.2	+0.1	322 26 59.1	.....	.....	.....	.....	-0 46.9	.....	.....	+86 25 15.1
	(o) β Leonis.....	56.5	60.1	0.0	40 31 58.2	+ 0.2	.....	.....	.....	+0 51.9	57.0	.....	+15 28 6.8
Mars North L.....	11.5	14.9	+0.1	49 45 13.3	- 0.1	29.5	29.89	34.4	+1 11.7	.....	.....	+ 6 14 32.2	
Mar. 6	ϵ Canis Minoris.....	36.1	37.3	+0.1	46 24 36.8	- 0.1	27.4	29.62	33.9	+1 3.5	.....	57.5	+ 9 35 17.3
	α Geminorum follow.	17.5	20.7	-0.2	23 46 18.8	- 0.1	.....	.....	.....	+0 26.6	57.6	.....	+32 14 12.2
	(c) 25 Monocerotis.....	39.5	39.4	+0.1	59 44 39.6	- 0.3	.....	.....	.....	+1 43.4	.....	.....	- 3 45 25.2
	(p) α Canis Minoris.....	47.5	49.0	+0.1	50 21 48.3	- 0.6	.....	.....	.....	+1 13.0	57.4	.....	+ 5 37 56.8
	13 Argûs.....	20.9	22.8	+0.1	53 13 22.0	- 0.1	.....	.....	.....	+1 20.9	.....	.....	+ 2 46 14.7
	(q) Groombridge 1418...	8.9	12.8	-0.1	330 25 10.7	+ 2.4	.....	.....	.....	-0 34.6	.....	.....	+85 36 19.0
	22 Argûs.....	57.0	59.2	+0.1	68 30 58.2	- 0.1	26.2	29.63	32.9	+2 32.9	.....	.....	-12 32 33.5
	A. S. C. 1099.....	25.5	28.1	-0.5	8 13 26.4	- 0.1	.....	.....	.....	+0 8.7	.....	.....	+47 47 22.5
	(r) 20 Hydræ.....	15.8	16.1	+0.1	64 7 15.9	- 1.2	25.9	29.62	31.7	+2 4.5	.....	.....	- 8 8 21.7
	26 Hydræ.....	34.9	35.5	+0.1	67 16 35.2	- 0.1	.....	.....	.....	+2 23.9	.....	.....	-11 18 1.5
	(a) 18 ^s after transit.													
	(b) 1 ^m after transit.													
(c) At Wire IV.														
(d) At Wire V.														
(e) At 9 ^h 32 ^m 5 ^s .														
(f) On meridian.														
(g) 20 ^s after transit.														
(h) At 11 ^h 28 ^m 35 ^s .														
(i) At 0 ^h 22 ^m 0 ^s .														
(k) At 1 ^h 14 ^m 50 ^s .														
(l) At 1 ^h 43 ^m 0 ^s .														
(m) 36 ^s after transit.														
(n) 20 ^s before transit.														
(o) At Wire II.														
(p) 40 ^s after transit.														
(q) At 8 ^h 12 ^m 53 ^s .														
(r) 1 ^m 10 ^s after transit.														

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.		
		I.	II.		°	'	"						observed.	adopted.	°	'	"
Mar. 6	10 Leonis Minoris....	4.2	7.0	-0.3	18	54	5.3	- 0.1	.....	.....	.....	+0 20.8	.....	57.5	+37	6	31.5
	(a) Groomb. 3548 S. P....	4.0	7.2	+0.1	322	23	5.8	- 0.1	.....	.....	.....	-0 46.9	.....	.....	+86	21	21.3
	υ Ursæ Majoris.....	29.0	30.8	-0.6	356	13	29.4	0.0	.....	.....	.....	-0 4.1	.....	.....	+59	47	32.2
	μ Ursæ Majoris.....	20.6	23.0	-0.4	13	42	21.3	- 0.1	26.4	29.63	32.3	+0 14.8	.....	.....	+42	18	21.5
	37 Ursæ Majoris.....	28.0	31.0	-0.6	358	6	28.8	0.0	.....	.....	.....	-0 2.1	.....	.....	+57	54	30.8
	42 Leonis Minoris....	54.6	56.6	-0.2	24	28	55.5	- 0.1	.....	.....	.....	+0 27.6	.....	.....	+31	31	34.5
	(b) Groomb. 4101 S. P....	58.8	62.2	+0.1	322	27	0.5	- 0.2	.....	.....	.....	-0 46.8	.....	.....	+86	25	16.0
	Mars South L.....	57.1	60.2	+0.1	49	36	58.6	- 0.1	26.2	29.61	31.0	+1 11.2	.....	.....	+ 6	22	47.8
Mar. 12	Sun South L.....	19.9	21.7	+0.1	59	43	20.9	- 0.1	38.0	29.77	37.2	+1 41.4	.....	57.8	- 3	44	4.4
	α Geminorum follow.	17.4	21.5	-0.2	23	46	19.3	- 0.1	.....	.....	.....	+0 26.4	58.3	.....	+32	14	12.2
	(c) 25 Monocerotis.....	43.0	45.4	+0.1	59	44	44.3	+ 0.1	34.0	29.75	36.0	+1 42.3	.....	.....	- 3	45	28.9
	(d) Groombridge 1418....	7.4	12.1	-0.1	330	25	9.7	+ 0.4	33.7	29.73	35.7	-0 34.1	.....	.....	+85	36	21.8
	ο Ursæ Majoris.....	52.1	56.0	-0.6	354	45	53.5	0.0	.....	.....	.....	-0 5.6	.....	.....	+61	15	9.9
	A. S. C. 1041.....	37.8	40.7	+0.1	74	59	39.3	- 0.1	.....	.....	.....	+3 39.6	.....	.....	-19	2	21.0
	* R. A. 8 ^h 28 ^m 20 ^s ...	51.2	54.8	0.0	35	42	52.9	- 0.1	.....	.....	.....	+0 43.0	.....	.....	+20	17	22.0
	ι Cancri.....	46.1	48.9	-0.2	26	39	47.3	- 0.1	.....	.....	.....	+0 30.1	.....	.....	+29	20	40.5
	(e) ε Hydræ.....	32.9	35.0	+0.1	48	59	34.0	- 0.3	.....	.....	.....	+1 8.8	.....	.....	+ 7	0	15.3
	(f) Groomb. 3402 S. P....	53.3	57.9	0.0	324	38	55.6	.....	.....	.....	.....	-0 42.7	.....	.....	+88	37	15.1
	ι Ursæ Majoris.....	33.6	36.9	-0.5	7	20	34.8	- 0.1	.....	.....	.....	+0 7.7	.....	.....	+48	40	15.4
	A. S. C. 1103.....	6.2	9.9	-0.3	16	55	7.8	- 0.1	.....	.....	.....	+0 18.2	.....	.....	+39	5	31.9
	A. S. C. 1117.....	43.3	47.1	-0.1	34	3	45.1	- 0.1	33.7	29.74	35.4	+0 40.5	.....	.....	+21	56	32.3
	A. S. C. 1135.....	35.1	37.7	-0.2	333	59	36.2	0.0	.....	.....	.....	-0 29.4	.....	.....	+82	1	51.0
	(f) Groomb. 3548 S. P.	0.8	5.0	+0.1	322	23	2.9	.....	.....	.....	.....	-0 46.4	.....	.....	+86	21	18.7
	(g) φ Ursæ Majoris.....	3.9	8.2	-0.5	1	12	5.6	+ 0.2	.....	.....	.....	+0 1.2	.....	.....	+54	48	50.8
	(f) Groombridge 1620 ..	38.5	42.7	-0.1	330	57	40.4	.....	33.0	29.74	35.2	-0 33.5	.....	.....	+85	3	50.9
	μ Ursæ Majoris.....	19.5	22.7	-0.4	13	42	20.8	- 0.1	.....	.....	.....	+0 14.6	.....	.....	+42	18	22.5
	37 Ursæ Majoris.....	25.3	29.2	-0.6	358	6	26.7	0.0	.....	.....	.....	-0 2.0	.....	.....	+57	54	33.1
	42 Leonis Minoris....	54.4	57.1	-0.2	24	28	55.5	- 0.1	.....	.....	.....	+0 27.3	.....	.....	+31	31	35.1
	α Hydræ & Crateris	23.8	26.8	+0.1	73	24	25.4	- 0.1	.....	.....	.....	+3 18.5	.....	.....	-17	26	46.0
	67 Leonis.....	45.4	48.1	-0.1	30	28	46.6	- 0.1	32.8	29.72	34.9	+0 35.3	.....	.....	+25	31	36.0
	σ Leonis.....	17.9	21.5	+0.1	49	5	19.8	- 0.1	.....	.....	.....	+1 9.1	.....	.....	+ 6	54	29.0
	(h) Groomb. 4101 S. P....	56.2	59.9	+0.1	322	26	58.2	- 0.9	.....	.....	.....	-0 46.3	.....	.....	+86	25	13.2
	(i) * R. A. 11 ^h 29 ^m 2 ^s ...	21.9	26.0	+0.1	48	50	24.1	- 0.2	.....	.....	.....	+1 8.5	.....	.....	+ 7	9	25.4
	Mars South L.....	57.4	60.9	+0.1	48	45	59.3	- 0.1	.....	.....	.....	+1 8.3	.....	.....	+ 7	13	50.3
	β Leonis.....	57.6	60.9	+0.1	40	31	59.3	- 0.1	32.5	29.70	34.8	+0 51.3	57.3	.....	+15	28	7.3
Mar. 13	Sun North L.....	36.8	38.5	+0.1	58	47	37.7	- 0.1	39.5	29.62	38.5	+1 36.9	.....	.....	- 2	48	16.7
Mar. 18	(k) δ Leonis.....	6.1	10.0	0.0	34	36	8.1	- 0.2	.....	.....	.....	+0 41.0	57.7	57.0	+21	24	8.1
	δ Hydræ & Crateris *	55.1	57.5	+0.1	69	52	56.5	- 0.1	.....	.....	.....	+2 40.8	57.3	.....	-13	54	40.2
	(l) σ Leonis.....	19.6	23.2	+0.1	49	5	21.5	- 0.4	35.0	29.61	37.0	+1 8.5	.....	.....	+ 6	54	27.4
	(m) Mars South L.....	1.9	5.2	+0.1	47	58	3.6	+ 0.8	.....	.....	.....	+1 5.9	.....	.....	+ 8	1	46.7
	(f) Groomb. 4101 S. P.	50.5	54.8	+0.1	322	26	52.8	.....	.....	.....	.....	-0 45.9	.....	.....	+86	25	9.9
	β Leonis.....	57.4	60.0	0.0	40	31	58.8	- 0.1	.....	.....	.....	+0 50.8	56.5	.....	+15	28	7.5
	(f) Groombridge 1850 ..	48.8	53.2	-0.1	329	32	50.8	.....	.....	.....	.....	-0 35.1	.....	.....	+86	28	41.3
	(f) Groombridge 1884 ..	8.3	14.0	-0.1	327	26	11.1	.....	35.0	29.60	36.4	-0 38.0	.....	.....	+88	35	23.9
	Jupiter South L.....	8.6	11.0	+0.1	60	46	9.9	- 0.1	.....	.....	.....	+1 45.9	.....	.....	- 4	46	58.7
	(n) α Ursæ Minoris S. P.	52.9	58.2	0.0	324	28	25.5	- 0.4	.....	.....	.....	-0 42.6	56.7	.....	+88	27	15.5
Pallas.....	43.5	46.0	+0.1	46	11	44.9	- 0.1	34.7	29.61	36.2	+1 2.0	.....	.....	+ 9	48	10.2	
Mar. 19	(o) Sun South L.....	38.5	41.0	+0.1	56	57	46.3	- 0.2	.....	.....	.....	+1 29.8	.....	57.1	- 0	58	18.8
	(p) Sun North L.....	37.4	41.1	+0.1	56	25	39.4	+ 0.1	.....	.....	.....	+1 28.0	.....	.....	- 0	26	10.4
	α Andromedæ.....	20.9	25.1	-0.1	27	48	22.9	- 0.1	42.3	29.64	42.0	+0 30.9	57.1	.....	+28	12	3.4
	Mercury Centre.....	24.9	27.4	+0.1	54	59	26.2	- 0.1	.....	.....	.....	+1 23.5	.....	.....	+ 1	0	7.5
	α Cassiopeæ.....	38.7	42.0	-0.5	0	21	39.9	0.0	.....	.....	.....	+0 0.3	56.6	.....	+55	39	16.9
(a) At 9 ^h 31 ^m 5 ^s .		(c) At Wire IV.		(i) 20 ^s after transit.		(n) At 13 ^h 4 ^m 35 ^s .											
(b) At 11 ^h 29 ^m 0 ^s .		(f) On meridian.		(k) 18 ^s after transit.		(o) At 23 ^h 53 ^m 42 ^s .											
(e) 6 ^s before transit.		(g) 48 ^s after transit.		(l) At Wire V.		(p) At 23 ^h 54 ^m 50 ^s .											
(d) At 8 ^h 10 ^m 45 ^s .		(h) At 11 ^h 25 ^m 24 ^s .		(m) 40 ^s after transit.													

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
Mar. 19	(a) α Ursæ Minoris	16.1	21.5	-0.1	327 34 18.7	+ 0.7	42.8	In. 29.63	42.8	-0 37.3	57.7	57.1	+88 27 15.0
	(b) Venus Centre	54.2	58.7	+0.1	48 45 56.6	+ 0.5	.....	.....	.....	+1 6.6	.....	.....	+ 7 13 53.4
Mar. 21	(c) Moon South L.	29.5	.....	-0.1	28 5 31.4	+ 0.2	.....	.....	.....	+0 30.6	.....	56.8	+27 54 54.6
	(d)	28.1	32.0	-0.1	28 5 30.0	+ 1.2	41.8	28.98	42.5	+0 30.6	.....	.....	+27 54 55.0
	136 Tauri	11.5	16.2	-0.1	28 26 13.8	- 0.1	.....	.....	.....	+0 31.0	.....	.....	+27 34 12.1
	α Orionis	30.7	33.3	+0.1	48 37 32.2	- 0.1	.....	.....	.....	+1 5.1	55.8	.....	+ 7 22 19.6
	κ Aurigæ	15.0	18.5	-0.2	26 27 16.6	- 0.1	.....	.....	.....	+0 28.6	.....	.....	+29 33 11.7
	μ Geminorum	47.3	50.7	-0.1	33 24 48.9	- 0.1	.....	.....	.....	+0 37.9	58.2	.....	+22 35 30.1
	(e) δ Ursæ Minoris S. P. ..	43.0	47.7	+0.1	322 36 45.5	- 7.2	40.8	28.99	41.6	-0 44.1	54.8	.....	+86 34 57.4
	(f) Groombridge 1418 ...	3.2	8.5	-0.1	330 25 5.8	+ 0.1	37.8	29.00	39.2	-0 33.0	.....	.....	+85 36 23.9
	ϵ Ursæ Majoris	50.5	55.0	-0.6	354 45 52.2	0.0	.....	.....	.....	-0 5.4	.....	.....	+61 15 10.0
	(g) 12 Hydræ	21.2	24.4	+0.1	68 56 22.9	- 0.7	.....	.....	.....	+2 29.3	.....	.....	-12 57 54.7
	Groomb. 3402 S. P.	50.8	55.0	0.0	324 38 52.9	- 0.1	.....	.....	.....	-0 41.6	.....	.....	+88 37 14.4
	ι Ursæ Majoris	32.2	37.0	-0.5	7 20 34.1	- 0.1	.....	.....	.....	+0 7.4	.....	.....	+48 40 15.4
	A. S. C. 1103	6.9	10.0	-0.3	16 55 8.2	- 0.1	.....	.....	.....	+0 17.6	.....	.....	+39 5 31.1
	A. S. C. 1117	44.8	48.7	-0.1	34 3 46.6	- 0.1	36.4	29.02	37.9	+0 39.3	.....	.....	+21 56 31.0
	A. S. C. 1135	31.4	34.6	-0.2	333 59 32.8	0.0	.....	.....	.....	-0 28.5	.....	.....	+82 1 52.5
	33 Hydræ	16.5	19.9	+0.1	61 11 18.3	- 0.1	.....	.....	.....	+1 45.2	.....	.....	- 5 12 6.6
	(h) Groomb. 3548 S. P.	54.8	59.2	+0.1	322 22 57.0	.....	.....	.....	.....	-0 45.0	.....	.....	+86 21 15.2
	ϕ Ursæ Majoris	3.3	7.9	-0.5	1 12 5.2	0.0	.....	.....	.....	+0 1.2	.....	.....	+54 48 50.4
	(i) A. S. C. 1199	3.7	7.0	+0.1	68 30 5.5	- 0.7	.....	.....	.....	+2 26.4	.....	.....	-12 31 34.4
	17 Sextantis	20.6	22.1	+0.1	63 36 21.5	- 0.1	.....	.....	.....	+1 56.6	.....	.....	- 7 37 21.2
	(h) Groombridge 1620 *	33.2	37.1	-0.1	330 57 35.1	.....	36.1	29.01	37.8	-0 32.4	.....	.....	+85 3 54.1
	30 Leonis Minoris ...	47.1	49.8	-0.3	21 23 48.1	- 0.1	.....	.....	.....	+0 22.8	.....	.....	+34 36 46.0
	1 Hydræ & Crateris ..	59.7	61.0	+0.1	71 29 0.4	- 0.1	.....	.....	.....	+2 51.8	.....	.....	-15 30 55.3
	σ Leonis	20.8	24.9	+0.1	49 5 23.0	- 0.1	35.0	29.00	36.7	+1 7.1	.....	.....	+ 6 54 26.8
	(k) Mars North L.	7.4	11.0	+0.1	47 36 9.3	+ 0.3	.....	.....	.....	+1 3.7	.....	.....	+ 8 23 43.5
	(l) Mars South L.	24.5	27.8	+0.1	47 36 26.3	- 0.2	.....	.....	.....	+1 3.7	.....	.....	+ 8 23 27.0
	(m) * R. A. 11 ^h 21 ^m 13 ^s	50.8	54.0	+0.1	47 30 52.5	- 0.3	.....	.....	.....	+1 3.5	.....	.....	+ 8 29 1.1
	β Leonis	59.8	62.1	0.0	40 32 1.0	- 0.1	.....	.....	.....	+0 49.8	57.9	.....	+15 28 6.1
	(h) Groombridge 1850 ...	47.8	52.0	-0.1	329 32 49.7	.....	.....	.....	.....	-0 34.4	.....	.....	+86 28 41.5
	(h) Groombridge 1884 ...	7.7	13.0	-0.1	327 26 10.3	.....	.....	.....	.....	-0 37.4	.....	.....	+88 35 23.9
	(h) Groomb. 144 S. P. ...	8.7	13.1	0.0	324 11 10.9	.....	34.2	28.99	35.9	-0 42.2	.....	.....	+88 9 31.9
	(h) A. S. C. 91 S. P.	13.4	18.3	+0.1	321 25 16.0	.....	.....	.....	.....	-0 46.7	.....	.....	+85 23 32.5
	(h) Groomb. 195 S. P.	52.5	56.1	+0.1	322 18 54.4	.....	.....	.....	.....	-0 45.2	.....	.....	+86 17 12.4
	(n) Jupiter South L.	46.0	49.2	+0.1	60 37 47.6	+ 0.1	.....	.....	.....	+1 43.1	.....	.....	- 4 38 34.0
	(o) Jupiter North L.	5.0	8.9	+0.1	60 37 7.1	- 0.6	.....	.....	.....	+1 43.1	.....	.....	- 4 37 52.8
	(p) α Ursæ Minoris S. P. ..	52.8	57.2	0.0	324 28 55.0	- 0.9	.....	.....	.....	-0 41.8	57.5	.....	+88 27 15.5
	Pallas	17.0	20.8	+0.1	45 6 19.0	- 0.1	.....	.....	.....	+0 58.4	.....	.....	+10 53 39.5
	(h) Groombridge 2007 ...	57.9	62.0	-0.1	330 25 59.9	.....	.....	.....	.....	-0 33.2	.....	.....	+85 35 30.1
	Ceres	50.8	54.0	+0.1	49 15 52.5	- 0.1	35.0	28.98	36.4	+1 7.5	.....	.....	+ 6 43 56.9
Mar. 22	(b) Sun South L.	42.6	45.0	+0.1	55 46 43.9	+ 0.2	40.0	29.01	40.0	+1 24.5	.....	57.1	+ 0 12 48.5
	(g) α Ursæ Minoris	47.7	52.8	-0.1	327 32 50.6	+88.3	.....	.....	.....	-0 36.7	57.0	.....	+88 27 14.9
	(r)	0.7	6.5	-0.1	327 34 3.1	+15.4	.....	.....	.....	-0 36.7	.....	.....	+88 27 15.3
	(h)	17.2	22.2	-0.1	327 34 19.6	.....	.....	.....	.....	-0 36.7	.....	.....	+88 27 14.2
	(s)	56.0	62.0	-0.1	327 33 58.9	+20.2	.....	.....	.....	-0 36.7	.....	.....	+88 27 14.7
	(k) Venus South L.	41.7	.....	+0.1	47 16 43.3	- 0.2	.....	.....	.....	+1 2.2	.....	.....	+ 8 43 11.8
	(l) Venus North L.	31.0	34.0	+0.1	47 16 32.6	+ 0.2	41.1	29.02	40.3	+1 2.2	.....	.....	+ 8 43 22.1
	α Arietis	20.9	24.8	-0.1	33 18 22.7	- 0.1	.....	.....	.....	+0 37.8	57.4	.....	+22 41 56.7
	α Persei	38.5	42.2	-0.5	6 43 39.8	- 0.1	41.0	29.02	40.9	+0 6.7	56.7	.....	+49 17 10.7
	η Tauri	3.3	8.5	-0.1	32 24 5.8	- 0.1	41.5	.....	.....	+0 36.5	57.4	.....	+23 36 14.9
	(t) Moon North L.	14.2	19.5	-0.1	27 51 16.8	- 2.0	40.1	29.04	40.6	+0 30.5	.....	.....	+28 9 11.8
Mar. 23	Mercury Centre	23.0	27.0	+0.1	51 11 25.1	- 0.1	47.0	28.98	46.5	+1 10.4	.....	57.0	+ 4 48 21.6
(a) At 1 ^h 5 ^m 33 ^s .		(e) At 6 ^h 17 ^m 27 ^s .		(i) 40° after transit.		(n) At Wire II.		(r) At 0 ^h 44 ^m 58 ^s .					
(b) At Wire V.		(f) At 8 ^h 8 ^m 40 ^s .		(k) At Wire I.		(o) 50° after transit.		(s) At 1 ^h 21 ^m 35 ^s .					
(c) At 5 ^h 35 ^m 36 ^s .		(g) At 8 ^h 43 ^m 52 ^s .		(l) At Wire IV.		(p) At 13 ^h 6 ^m 5 ^s .		(t) At 6 ^h 38 ^m 45 ^s .					
(d) At 5 ^h 36 ^m 14 ^s .		(h) On meridian.		(m) 30° after transit.		(q) At 0 ^h 21 ^m 10 ^s .							

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.		
		I.	II.		observed.	adopted.	°						'	"			
Mar. 23	(a) α Ursæ Minoris	8.0	14.0	-0.1	327	34	10.9	+ 7.4	.....	.....	.....	-0 36.2	56.8	57.0	+88	27	14.9
	(b)	12.0	17.2	-0.1	327	34	14.5	+ 4.4	.....	.....	.....	-0 36.2	.....	.....	+88	27	14.3
	(c)	32.1	37.7	-0.1	327	33	34.8	+43.7	.....	.....	.....	-0 36.2	.....	.....	+88	27	14.7
	(d) Venus North L.	5.6	....	+0.1	46	47	8.8	- 0.2	.....	.....	.....	+0 59.9	.....	.....	+ 9	12	48.5
	(e) Venus South L.	13.5	19.5	+0.1	46	47	16.7	+ 0.2	47.6	28.99	47.5	+0 59.9	.....	.....	+ 9	12	40.2
	α Geminorum follow.	15.5	21.6	-0.2	23	46	18.4	- 0.1	39.0	29.03	40.9	+0 25.4	57.0	.....	+32	14	13.3
	α Canis Minoris	49.4	55.0	+0.1	50	21	52.4	- 0.1	.....	.....	.....	+1 9.7	58.4	.....	+ 5	37	55.0
	26 Monocerotis.....	45.0	48.1	+0.1	65	9	46.6	- 0.1	.....	.....	.....	+2 4.1	.....	.....	- 9	10	53.6
	(f) Moon North L.	48.8	53.6	-0.1	29	53	51.1	- 4.6	.....	.....	.....	+0 33.2	.....	.....	+26	6	37.3
	(g) 6 Argûs.....	21.0	24.8	+0.1	72	47	23.1	- 1.9	.....	.....	.....	+3 4.2	.....	.....	-16	49	28.4
	6 Cancri	53.5	59.5	-0.1	27	45	56.4	- 0.1	.....	.....	.....	+0 30.4	.....	.....	+28	14	30.3
	16 Argûs	14.5	17.5	+0.1	74	44	16.1	- 0.1	39.0	29.02	40.6	+3 28.2	.....	.....	-18	46	47.2
	(h) Groombridge 1418....	3.9	9.0	-0.1	330	25	6.4	.....	.....	.....	.....	-0 32.9	.....	.....	+85	36	23.5
	α Ursæ Majoris	50.2	54.9	-0.6	354	45	52.0	0.0	.....	.....	.....	-0 5.4	.....	.....	+61	15	10.4
	θ Cancri.....	8.2	12.4	0.0	37	22	10.4	- 0.1	.....	.....	.....	+0 44.1	.....	.....	+18	38	2.6
	π^2 Ursæ Majoris	52.6	56.1	-0.5	351	7	53.8	0.0	.....	.....	.....	-0 9.1	.....	.....	+64	53	12.3
	(i) * R. A. 8 ^h 28 ^m 20 ^s ..	52.9	56.9	0.0	35	42	54.8	- 0.2	.....	.....	.....	+0 41.5	.....	.....	+20	17	20.9
	12 Hydræ	20.5	24.0	+0.1	68	56	22.4	- 0.1	.....	.....	.....	+2 28.8	.....	.....	-12	57	54.1
	(k) Groomb. 3402 S. P.	50.0	55.0	0.0	324	38	52.5	- 0.5	.....	.....	.....	-0 41.2	.....	.....	+88	37	13.8
	(l) A. S. C. 1103.....	5.0	10.0	-0.3	16	55	7.2	0.0	.....	.....	.....	+0 17.5	.....	.....	+39	5	32.3
	A. S. C. 1117.....	43.9	48.8	-0.1	34	3	46.2	- 0.1	38.7	29.02	39.9	+0 39.1	.....	.....	+21	56	31.8
	A. S. C. 1135.....	29.9	33.9	-0.2	333	59	31.7	0.0	.....	.....	.....	-0 28.3	.....	.....	+82	1	53.6
	α Hydræ	55.2	58.7	+0.1	63	56	57.1	- 0.1	.....	.....	.....	+1 57.7	56.0	.....	- 7	57	57.7
	33 Hydræ	15.2	18.9	+0.1	61	11	17.2	- 0.1	.....	.....	.....	+1 44.8	.....	.....	- 5	12	4.9
	φ Ursæ Majoris	2.0	7.3	-0.5	1	12	4.2	0.0	.....	.....	.....	+0 1.2	.....	.....	+54	48	51.6
	(h) Groombridge 1620 *	31.2	35.8	-0.1	330	57	33.5	.....	.....	.....	.....	-0 32.3	.....	.....	+85	3	55.8
	30 Leonis Minoris....	46.3	49.1	-0.3	21	23	47.4	- 0.1	37.7	29.03	38.8	+0 22.7	.....	.....	+34	36	47.0
	1 Hydræ & Crateris... ..	1.0	3.5	+0.1	71	29	2.3	- 0.1	.....	.....	.....	+2 51.2	.....	.....	-15	30	56.4
	42 Leonis Minoris	51.9	55.0	-0.2	24	28	53.2	- 0.1	.....	.....	.....	+0 26.4	.....	.....	+31	31	37.5
	67 Leonis.....	43.9	48.0	-0.1	30	28	45.8	- 0.1	36.9	29.04	38.2	+0 34.2	.....	.....	+25	31	37.1
	(m) Mars South L.	4.4	7.4	+0.1	47	23	5.9	+ 0.3	.....	.....	.....	+1 3.1	.....	.....	+ 8	36	47.7
	(l) Mars North L.	48.9	52.1	+0.1	47	22	50.5	- 0.2	.....	.....	.....	+1 3.1	.....	.....	+ 8	37	3.6
	β Leonis	58.0	62.9	0.0	40	32	0.5	- 0.1	.....	.....	.....	+0 49.7	57.4	.....	+15	28	6.9
	(n) Groombridge 1884 ...	4.2	11.0	-0.1	327	26	7.5	- 0.6	35.8	29.06	37.3	-0 37.4	.....	.....	+88	35	27.5
	(h) Groomb. 144 S. P. ...	8.0	13.1	0.0	324	11	10.6	.....	.....	.....	.....	-0 42.2	.....	.....	+88	9	31.4
	(h) A. S. C. 91 S. P.	12.1	17.5	+0.1	321	25	14.9	.....	.....	.....	.....	-0 46.6	.....	.....	+85	23	31.3
	(o) α Ursæ Minoris S. P. ..	51.1	56.9	0.0	324	28	54.0	- 1.4	35.9	29.05	36.8	-0 41.7	56.7	.....	+88	27	13.9
Mar. 24	(p) Moon North L.....	6.0	....	-0.1	33	21	7.3	+11.9	.....	.....	.....	+0 38.0	.....	55.9	+22	38	58.7
	(q)	15.8	....	-0.1	33	21	17.1	+ 2.1	.....	.....	.....	+0 38.0	.....	.....	+22	38	58.7
	(r)	22.1	....	-0.1	33	21	23.4	- 5.0	.....	.....	.....	+0 38.0	.....	.....	+22	38	59.5
	(s)	29.3	32.1	-0.1	33	21	30.6	-12.6	37.1	28.97	38.5	+0 38.0	.....	.....	+22	38	59.9
	(h) Groomb. 3402 S. P.	49.7	53.0	0.0	324	38	51.3	.....	.....	.....	-0 41.3	.....	.....	+88	37	14.1	
	ι Ursæ Majoris	30.9	35.5	-0.5	7	20	32.7	- 0.1	.....	.....	.....	+0 7.4	.....	.....	+48	40	15.9
	(t) Groomb. 3402 S. P.	54.5	59.0	0.0	324	38	56.7	- 4.6	.....	.....	.....	-0 41.3	.....	.....	+88	37	14.9
	ξ Cancri.....	42.9	46.8	-0.1	33	18	44.7	- 0.1	.....	.....	.....	+0 38.1	.....	.....	+22	41	33.2
	(u) 83 Cancri.....	10.2	13.5	0.0	37	37	11.9	- 0.2	.....	.....	.....	+0 44.6	.....	.....	+18	22	59.6
	α Hydræ	55.1	58.1	+0.1	63	56	56.8	- 0.1	.....	.....	.....	+1 58.0	55.9	.....	.....	.....	.....
θ Ursæ Majoris.....	20.1	24.2	-0.5	3	36	21.7	0.0	36.8	28.97	38.0	+0 3.6	.....	.....	+52	24	30.6	
Mar. 25	Sun South L.	53.0	57.2	+0.1	54	35	55.2	- 0.1	39.3	29.07	40.0	+1 21.2	.....	56.9	+ 1	23	40.6
	(x) α Ursæ Minoris.....	17.0	22.1	-0.1	327	33	19.4	+59.7	.....	.....	.....	-0 36.8	55.9	.....	+88	27	14.6
	α Cassiopeæ.....	40.8	43.9	-0.5	0	21	41.9	0.0	.....	.....	.....	+0 0.3	57.2	.....	+55	39	14.7
	(h) α Ursæ Minoris	16.8	21.9	-0.1	327	34	19.2	.....	.....	.....	-0 36.8	.....	.....	+88	27	14.5	
	(y)	22.7	27.2	-0.1	327	33	24.8	+53.7	41.2	29.09	41.0	-0 36.8	.....	.....	+88	27	15.2
	(m) Venus South L.	5.8	....	+0.1	45	49	7.5	- 0.2	.....	.....	.....	+0 59.2	.....	.....	+10	10	50.4
(a) At 0 ^h 49 ^m 15 ^s .		(f) At 7 ^h 39 ^m 7 ^s .		(l) 36' after transit.		(p) At 8 ^h 33 ^m 31 ^s .		(t) At 8 ^h 54 ^m 30 ^s .									
(b) At 1 ^h 10 ^m 10 ^s .		(g) At 7 ^h 43 ^m 48 ^s .		(m) At Wire I.		(q) At 8 ^h 34 ^m 24 ^s .		(u) 18' after transit.									
(c) At 1 ^h 29 ^m 50 ^s .		(h) On meridian.		(n) At 12 ^h 19 ^m 30 ^s .		(r) At 8 ^h 35 ^m 6 ^s .		(x) At 0 ^h 27 ^m 30 ^s .									
(d) 21' before transit.		(i) At Wire V.		(o) At 13 ^h 6 ^m 10 ^s .		(s) At 8 ^h 35 ^m 56 ^s .		(y) At 1 ^h 33 ^m 0 ^s .									
(e) 20' after transit.		(k) At 8 ^h 47 ^m 45 ^s .															

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
Mar. 25	(a) Venus North L.	56.7	60.0	+0.1	45 48 58.4	- 0.1	.....	.....	.....	+0 59.2	.....	56.9	+10 10 59.4
	α Arietis.....	20.9	24.1	- 0.1	33 18 22.4	- 0.1	.....	.....	.....	+0 37.9	57.0	.....	+22 41 56.7
	(b) Groombridge 1418 ...	1.4	6.0	- 0.1	330 25 3.6	+ 3.4	.....	.....	.....	- 0 33.3	.....	.....	+85 36 23.2
	1 Hydræ.....	24.9	27.0	+0.1	59 13 26.0	- 0.1	38.1	29.24	39.9	+1 37.6	.....	.....	- 3 14 6.6
	(c) π ² Ursæ Majoris.....	50.6	54.3	- 0.5	351 7 51.9	+ 2.0	.....	.....	.....	- 0 9.2	.....	.....	+64 53 12.2
	(d) ε Hydræ.....	33.2	37.0	+0.1	48 59 35.2	+ 0.2	.....	.....	.....	+1 7.1	.....	.....	+ 7 0 14.4
	(e) 12 Hydræ.....	20.0	23.3	+0.1	68 56 21.8	- 1.3	.....	.....	.....	+2 30.4	.....	.....	-12 57 54.0
	(f) ω Hydræ.....	55.7	60.0	+0.1	50 15 58.0	- 0.3	.....	.....	.....	+1 10.3	.....	.....	+ 5 43 48.9
	(g) ζ Cancri.....	43.9	47.9	- 0.1	33 18 45.8	- 0.1	.....	.....	.....	+0 38.4	.....	.....	+22 41 32.8
	18 Ursæ Majoris.....	50.8	55.0	- 0.5	1 19 52.4	0.0	36.7	29.25	38.7	+0 1.3	.....	.....	+54 41 3.2
	83 Cancri.....	9.6	13.5	0.0	37 37 11.6	- 0.1	.....	.....	.....	+0 45.1	.....	.....	+18 23 0.3
	27 Hydræ.....	34.5	36.8	+0.1	64 51 35.8	- 0.1	.....	.....	.....	+2 4.0	.....	.....	- 8 52 42.8
	(h) Moon North L.	5.0	.....	0.0	37 52 6.8	+12.1	.....	.....	.....	+0 45.5	.....	.....	+18 7 52.5
	(i)	18.2	.....	0.0	37 52 20.0	- 0.4	.....	.....	.....	+0 45.5	.....	.....	+18 7 51.8
	(k)	27.5	31.0	0.0	37 52 29.3	-10.6	.....	.....	.....	+0 45.5	.....	.....	+18 7 52.7
	22 Leonis.....	9.6	13.0	- 0.1	30 51 11.2	- 0.1	.....	.....	.....	+0 34.9	.....	.....	+25 9 10.9
	ν Leonis..... *	30.0	33.8	0.0	42 47 32.0	- 0.1	.....	.....	.....	+0 54.2	.....	.....	+13 12 30.8
	(m) υ ² Hydræ.....	50.7	55.4	+0.1	68 15 53.2	- 0.4	.....	.....	.....	+2 25.7	.....	.....	-12 17 21.6
	(n) η Leonis..... *	31.7	35.2	0.0	38 27 33.5	- 0.2	.....	.....	.....	+0 46.5	.....	.....	+17 32 37.1
	17 Sextantis.....	20.1	22.0	+0.1	63 36 21.2	- 0.1	36.8	29.27	38.4	+1 57.4	.....	.....	- 7 37 21.6
	30 Leonis Minoris ...	45.1	48.6	- 0.3	21 23 46.5	- 0.1	.....	.....	.....	+0 22.9	.....	.....	+34 36 47.6
	1 Hydræ & Crateris..	59.0	61.4	+0.1	71 29 0.3	- 0.1	.....	.....	.....	+2 53.1	.....	.....	-15 30 56.4
	3 Hydræ & Crateris..	2.9	5.2	+0.1	72 25 4.2	- 0.1	.....	.....	.....	+3 2.8	.....	.....	-16 27 10.0
	α Hydræ & Crateris..	27.4	30.1	+0.1	73 24 28.8	- 0.1	.....	.....	.....	+3 14.2	.....	.....	-17 26 46.0
	χ Leonis.....	43.0	45.2	+0.1	47 47 44.1	- 0.1	.....	.....	.....	+1 4.6	.....	.....	+ 8 12 8.3
	↓ Ursæ Majoris.....	32.8	36.2	- 0.4	10 38 34.1	- 0.1	35.9	29.29	37.7	+0 11.0	.....	.....	+45 22 11.9
	(o) Mars North L.	30.0	33.0	+0.1	47 10 31.6	+ 0.3	.....	.....	.....	+1 3.3	.....	.....	+ 8 49 21.7
	(f) Mars South L.	45.0	48.0	+0.1	47 10 46.6	- 0.2	.....	.....	.....	+1 3.3	.....	.....	+ 8 49 7.2
	* R. A. 11 ^h 17 ^m 6 ^s ..	39.4	43.4	+0.1	47 9 41.5	- 0.1	.....	.....	.....	+1 3.3	.....	.....	+ 8 50 12.2
	β Leonis.....	58.5	61.2	0.0	40 31 59.9	- 0.1	.....	.....	.....	+0 50.3	57.5	.....	+15 28 6.8
	(p) Groombridge 1850 ...	46.6	51.2	- 0.1	329 32 48.7	.....	.....	.....	.....	- 0 34.7	.....	.....	+86 28 42.9
	(p) Groombridge 1884 ...	5.8	11.9	- 0.1	327 26 8.8	.....	35.0	29.32	37.2	- 0 37.8	.....	.....	+88 35 25.9
	(q) α Ursæ Minoris S. P.	39.9	44.4	0.0	324 29 42.1	-50.0	.....	.....	.....	- 0 42.2	56.8	.....	+88 27 13.0
	(p) Groomb. 144 S. P. ...	7.2	12.0	0.0	324 11 9.6	.....	.....	.....	.....	- 0 42.7	.....	.....	+88 9 30.0
	(p) A. S. C. 91 S. P.	12.0	18.1	+0.1	321 25 15.2	.....	.....	.....	.....	- 0 47.2	.....	.....	+85 23 31.1
	(r) Groomb. 195 S. P.	50.9	55.5	+0.1	322 18 53.3	- 0.1	.....	.....	.....	- 0 45.7	.....	.....	+86 17 10.6
	(o) Jupiter North L.	29.1	31.7	+0.1	60 25 30.5	+ 0.3	.....	.....	.....	+1 43.5	.....	.....	- 4 26 17.4
	(n) Jupiter South L.	11.5	14.0	+0.1	60 26 12.9	- 0.5	.....	.....	.....	+1 43.5	.....	.....	- 4 26 59.0
	(s) α Ursæ Minoris S. P.	50.7	55.5	0.0	324 28 53.1	- 0.1	.....	.....	.....	- 0 42.2	.....	.....	+88 27 13.9
	Pallas.....	48.6	51.5	0.0	43 40 50.1	- 0.1	.....	.....	.....	+0 56.2	.....	.....	+12 19 10.7
	(p) Groombridge 2007 ...	55.9	60.9	- 0.1	330 25 58.3	.....	.....	.....	.....	- 0 33.6	.....	.....	+85 35 32.2
	(t) α Ursæ Minoris S. P.	33.8	37.9	0.0	324 29 58.8	-43.1	35.0	29.34	36.6	- 0 42.2	.....	.....	+88 27 13.6
	Ceres.....	11.1	14.9	+0.1	48 56 13.1	- 0.1	.....	.....	.....	+1 7.5	.....	.....	+ 7 3 36.1
Mar. 26	(u) Sun North L.	18.6	23.1	+0.1	53 40 20.9	- 0.1	.....	.....	.....	+1 19.5	.....	56.6	+ 2 19 16.3
	(v) Sun South L.	19.2	22.2	+0.1	54 12 20.7	+ 0.3	39.6	29.48	39.8	+1 21.1	.....	.....	+ 1 47 14.5
	(w) Venus Centre	16.6	20.5	+0.1	45 20 18.6	- 0.1	44.0	29.47	41.6	+0 58.7	.....	.....	+10 39 39.4
Mar. 28	(x) α Ursæ Minoris.....	11.5	16.7	- 0.1	327 33 14.1	+67.1	.....	.....	.....	- 0 37.3	56.5	56.4	+88 27 12.5
Mar. 29	(y) α Persei.....	37.2	41.0	- 0.5	6 43 38.6	+ 1.0	38.5	29.32	39.4	+0 6.8	55.6	.....	+49 17 10.0
	α Hydræ.....	53.2	55.0	+0.1	63 56 54.1	- 0.1	.....	.....	.....	+2 1.0	55.9	.....	- 7 57 58.6
	θ Ursæ Majoris.....	18.0	23.7	- 0.5	3 36 20.3	0.0	.....	.....	.....	+0 3.7	.....	.....	+52 24 32.4
	33 Hydræ.....	14.5	17.2	+0.1	61 11 15.9	- 0.1	32.2	29.42	37.0	+1 47.6	.....	.....	- 5 12 7.0
	22 Leonis.....	7.0	10.7	- 0.1	30 51 8.7	- 0.1	.....	.....	.....	+0 35.5	.....	.....	+25 9 12.3
	(z) υ ² Hydræ.....	45.8	50.9	+0.1	68 15 48.4	- 1.1	.....	.....	.....	+2 28.0	.....	.....	-12 17 18.9
(a) At Wire III.		(f) 30 ^s after transit.		(m) At Wire IV.		(r) At 12 ^h 51 ^m 15 ^s .		(w) Hazy					
(b) At 8 ^h 13 ^m 20 ^s .		(g) 18 ^s after transit.		(n) At Wire V.		(s) At 13 ^h 2 ^m 33 ^s .		(x) At 0 ^h 25 ^m 30 ^s .					
(c) At 8 ^h 28 ^m 0 ^s .		(h) At 9 ^h 25 ^m 28 ^s .		(o) At Wire I.		(t) At 13 ^h 29 ^m 40 ^s .		(y) 1 ^m 18 ^s after transit.					
(d) At Wire II.		(i) At 9 ^h 26 ^m 26 ^s .		(p) On meridian.		(u) At 0 ^h 18 ^m 25 ^s .		(z) 1 ^m after transit.					
(e) 1 ^m 6 ^s after transit.		(k) At 9 ^h 27 ^m 17 ^s .		(q) At 12 ^h 30 ^m 20 ^s .		(v) At 0 ^h 20 ^m 10 ^s .							

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
Mar. 29	λ^2 Hydræ.....	21.7	26.1	+0.1	67 32 23.9	- 0.1	31.9	29.42	36.6	+2 22.9	.....	56.4	-11 33 50.3
	μ Hydræ	5.2	8.0	+0.1	71 59 6.7	- 0.1	.....	.....	.....	+3 0.8	.....	.....	-16 1 11.0
	37 Leonis Minoris....	54.0	59.0	-0.2	23 11 56.2	- 0.1	.....	.....	.....	+0 25.5	.....	.....	+32 48 34.8
	3 Hydræ & Crateris..	1.5	3.9	+0.1	72 25 2.8	- 0.1	.....	.....	.....	+3 5.4	.....	.....	-16 27 11.7
	β Ursæ Majoris	18.6	22.1	-0.6	358 46 19.7	0.0	.....	.....	.....	-0 1.3	.....	.....	+57 14 38.0
	γ Leonis.....	41.4	43.5	+0.1	47 47 42.6	- 0.1	.....	.....	.....	+1 5.5	.....	.....	+ 8 12 8.4
	ψ Ursæ Majoris	32.5	35.9	-0.4	10 38 33.8	- 0.1	31.9	29.43	35.5	+0 11.1	.....	.....	+45 22 11.6
	(a) Mars South L.	19.5	22.6	+0.1	46 49 21.2	+ 0.3	.....	.....	.....	+1 3.3	.....	.....	+ 9 10 31.6
	(b) Mars North L.	4.0	8.0	+0.1	46 49 6.1	- 0.2	.....	.....	.....	+1 3.3	.....	.....	+ 9 10 47.2
	β Leonis.....	56.5	59.9	0.0	40 31 58.1	- 0.1	.....	.....	.....	+0 50.9	56.5	.....	+15 28 7.5
	(c) Groombridge 1850....	45.8	50.7	-0.1	329 32 48.2	+ 0.8	.....	.....	.....	-0 35.2	.....	.....	+86 28 42.6
	σ Virginis.....	28.2	31.5	+0.1	46 22 29.9	- 0.1	.....	.....	.....	+1 2.4	.....	.....	+ 9 37 24.2
	η Virginis.....	59.4	62.2	+0.1	55 46 0.9	- 0.1	.....	.....	.....	+1 27.3	.....	.....	+ 0 13 28.3
	(d) Groombridge 1884 ..	5.0	10.5	-0.1	327 26 7.6	- 0.1	31.5	29.43	35.0	-0 38.2	.....	.....	+88 35 27.1
	(e) Moon South L.	35.7	38.2	+0.1	61 7 37.1	+ 6.4	.....	.....	.....	+1 47.6	.....	.....	- 5 8 34.7
	(f)	57.5	60.2	+0.1	61 7 59.0	-15.0	.....	.....	.....	+1 47.6	.....	.....	- 5 8 35.2
	(g) α Ursæ Minoris S. P.	32.9	35.5	0.0	324 29 34.2	-41.7	.....	.....	.....	-0 42.7	57.4	.....	+88 27 13.4
	(h) Groomb. 144 S. P.	6.7	11.0	0.0	324 11 8.8	- 0.2	.....	.....	.....	-0 43.2	.....	.....	+88 9 29.0
	ψ Virginis.....	52.1	54.9	+0.1	64 38 53.6	- 0.1	.....	.....	.....	+2 5.1	.....	.....	- 8 40 2.2
	(i) A. S. C. 91 S. P.	12.5	17.1	+0.1	321 25 14.9	- 0.2	.....	.....	.....	-0 47.7	.....	.....	+85 23 30.6
	(k) Groomb. 195 S. P.	50.0	54.4	+0.1	322 18 52.3	- 0.1	.....	.....	.....	-0 46.2	.....	.....	+86 17 9.6
	(l) Jupiter South L.	22.9	25.1	+0.1	60 14 24.1	+ 0.3	.....	.....	.....	+1 43.8	.....	.....	- 4 15 11.8
	(b) Jupiter North L.	40.2	43.2	+0.1	60 13 41.8	- 0.4	.....	.....	.....	+1 43.8	.....	.....	- 4 14 28.8
	θ Virginis.....	3.9	7.2	+0.1	60 40 5.6	- 0.1	.....	.....	.....	+1 45.7	.....	.....	- 4 40 54.8
	(m) α Ursæ Minoris S. P.	51.0	54.0	0.0	324 28 52.5	- 0.6	.....	.....	.....	-0 42.7	.....	.....	+88 27 12.8
	Pallas	28.1	30.1	0.0	42 18 29.1	- 0.1	.....	.....	.....	+0 54.2	.....	.....	+13 41 33.2
	(n) Groombridge 2007....	56.2	60.5	-0.1	330 25 58.2	.....	.....	.....	.....	-0 34.0	.....	.....	+85 35 32.2
	Ceres.....	43.5	46.7	+0.1	48 37 45.3	- 0.1	31.3	29.44	34.8	+1 7.6	.....	.....	+ 7 22 3.6
	(o) α Ursæ Minoris S. P.	49.5	52.0	0.0	324 29 50.8	-57.7	.....	.....	.....	-0 42.7	.....	.....	+88 27 14.0
	(p) α Ursæ Minoris.....	21.1	25.8	-0.1	327 33 23.4	+58.9	.....	.....	.....	-0 37.4	57.0	57.0	+88 27 12.1
Mar. 30	(q) Sun South L.	38.7	44.0	+0.1	52 38 41.5	- 0.1	.....	.....	.....	+1 16.7	.....	.....	+ 3 20 58.9
	(r) Sun North L.	39.9	44.0	+0.1	52 6 42.0	+ 0.2	38.1	29.40	38.5	+1 15.2	.....	.....	+ 3 52 59.6
	(u) α Ursæ Minoris	19.4	24.5	-0.1	327 34 21.9	.....	.....	.....	.....	-0 37.4	.....	.....	+88 27 12.5
	Mercury Centre.....	39.9	43.1	0.0	44 57 41.6	- 0.1	39.5	29.40	39.2	+0 58.3	.....	.....	+11 2 17.2
	α Arietis.....	20.7	23.9	-0.1	33 18 22.3	- 0.1	.....	.....	.....	+0 38.4	57.0	.....	+22 41 56.4
	(n) Venus North L.	52.5	.....	0.0	43 27 54.6	.....	.....	.....	.....	+0 55.4	.....	.....	+12 32 7.0
	(b) Venus South L.	0.8	4.8	0.0	43 28 2.9	+ 0.4	.....	.....	.....	+0 55.4	.....	.....	+12 31 58.3
	(s) 18 Ursæ Majoris.....	49.8	54.4	-0.5	1 19 51.6	.....	35.2	29.32	38.4	+0 1.3	.....	55.5	+54 41 2.6
	(t) 27 Hydræ.....	32.1	34.4	+0.1	64 51 33.3	- 0.5	.....	.....	.....	+2 4.8	.....	.....	- 8 52 42.1
	α Hydræ.....	53.7	55.3	+0.1	63 56 54.5	.....	.....	.....	.....	+1 59.8	55.2	.....	- 7 57 58.8
	θ Ursæ Majoris.....	18.5	22.9	-0.5	3 36 20.2	.....	.....	.....	.....	+0 3.7	56.3	.....	+52 24 31.6
	ϵ Hydræ	27.7	30.0	+0.1	56 24 29.0	.....	.....	.....	.....	+1 28.5	.....	.....	- 0 25 2.0
	ϵ Leonis.....	34.6	37.4	-0.1	31 29 35.9	.....	.....	.....	.....	+0 36.1	.....	.....	+24 30 43.5
	22 Leonis.....	7.5	10.0	-0.1	30 51 8.6	.....	.....	.....	.....	+0 35.2	.....	.....	+25 9 11.7
	(u) ν^2 Hydræ.....	49.0	51.8	+0.1	68 15 50.5	- 0.1	.....	.....	.....	+2 26.7	.....	.....	-12 17 21.6
	λ^2 Hydræ.....	22.2	25.8	+0.1	67 32 24.0	.....	34.7	29.33	37.5	+2 21.5	.....	.....	-11 33 50.0
	37 Leonis Minoris	53.4	57.3	-0.2	23 11 55.1	.....	.....	.....	.....	+0 25.2	.....	.....	+32 48 35.2
	ψ Ursæ Majoris	31.0	34.5	-0.4	10 38 32.4	.....	34.9	29.33	37.5	+0 11.0	.....	.....	+45 22 12.1
	Groombridge 1850....	45.7	50.0	-0.1	329 32 47.8	.....	34.5	29.32	37.0	-0 34.8	.....	.....	+86 28 42.5
	(v) α Ursæ Minoris S. P.	40.0	44.0	0.0	324 29 42.0	-51.3	.....	.....	.....	-0 42.2	55.9	.....	+88 27 13.0
	Groomb. 144 S. P.	6.0	10.6	0.0	324 11 8.3	.....	.....	.....	.....	-0 42.7	.....	.....	+88 9 30.1
	(w) ψ Virginis.....	53.9	56.5	+0.1	64 38 55.3	- 0.4	.....	.....	.....	+2 3.7	.....	.....	- 8 40 3.1
	(x) A. S. C. 91 S. P.	11.0	17.5	+0.1	321 25 14.3	- 0.1	.....	.....	.....	-0 47.2	.....	.....	+85 23 31.5
	(y) Jupiter Centre	4.1	7.5	+0.1	60 11 5.9	- 0.2	.....	.....	.....	+1 42.5	.....	.....	- 4 11 52.7
(a) 30 ^s before transit.		(g) At 12 ^h 33 ^m 5 ^s .		(n) On meridian.		vation Mr Adie cleaned		(u) 10 ^s after transit.					
(b) 36 ^s after transit.		(h) At 12 ^h 43 ^m 30 ^s .		(o) At 13 ^h 34 ^m 12 ^s .		the limb of the Circle, and		(v) At 12 ^h 30 ^m 0 ^s .					
(c) At 11 ^h 54 ^m 40 ^s .		(i) At 12 ^h 49 ^m 5 ^s .		(p) At 0 ^h 27 ^m 48 ^s .		moved the Wire-plate for		(w) 30 ^s after transit.					
(d) At 12 ^h 14 ^m 50 ^s .		(k) At 12 ^h 51 ^m 36 ^s .		(q) At 0 ^h 33 ^m 0 ^s .		the better adjustment of		(x) At 12 ^h 49 ^m 40 ^s .					
(e) At 12 ^h 26 ^m 2 ^s .		(l) At Wire I.		(r) At 0 ^h 34 ^m 24 ^s .		the line of collimation.		(y) At Wire IV.					
(f) At 12 ^h 27 ^m 28 ^s .		(m) At 13 ^h 4 ^m 35 ^s .		(s) Before this obser-		(t) At Wire V.							

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
Mar. 30	(a) α Ursæ Minoris S. P.	47.7	52.0	0.0	324 28 49.9	- 0.3	.....	.....	.....	-0 42.2	.....	55.5	+88 27 11.9
	(b) Moon South L.....	32.8	35.2	+0.1	66 51 34.1	- 1.2	.....	.....	.....	+2 17.0	.....	.....	-10 52 54.4
	(c)	49.8	52.2	+0.1	66 51 51.0	-18.0	.....	.....	.....	+2 17.0	.....	.....	-10 52 54.5
	(d) α Virginis.....	2.1	5.5	+0.1	66 18 4.0	.....	.....	.....	.....	+2 13.4	54.7	.....	-10 19 21.9
	Ceres.....	20.9	23.2	+0.1	48 33 22.2	.....	.....	.....	.....	+1 6.6	.....	.....	+ 7 26 26.7
	(e) α Ursæ Minoris S. P.	44.0	47.8	0.0	324 29 45.9	-55.4	34.0	29.27	36.7	-0 42.2	.....	.....	+88 27 12.8
April 4	π^2 Ursæ Majoris.....	51.5	54.0	-0.5	351 7 52.3	.....	33.0	29.67	35.8	-0 9.4	.....	55.5	+64 53 12.6
	ϵ Hydræ.....	30.2	33.4	+0.1	48 59 31.9	.....	.....	.....	.....	+1 8.7	.....	.....	+ 7 0 14.9
	(f) A. S. C. 1075.....	7.4	11.0	+0.1	57 18 9.4	- 0.7	.....	.....	.....	+1 33.0	.....	.....	- 1 18 46.2
	α Hydræ.....	52.5	53.9	+0.1	63 56 53.2	.....	.....	.....	.....	+2 1.8	55.7	.....	- 7 57 59.5
	θ Ursæ Majoris.....	17.1	21.0	-0.5	3 36 18.5	.....	33.0	29.66	35.8	+0 3.7	55.3	.....	+52 24 33.3
April 7	(g) α Ursæ Minoris.....	40.5	44.9	-0.1	327 33 42.6	+42.2	41.5	30.10	40.0	-0 37.9	56.5	56.5	+88 27 9.6
	.....	22.6	27.2	-0.1	327 34 24.8	.....	.....	.....	.....	-0 37.9	.....	.....	+88 27 9.6
April 8	(h) Sun North L.....	29.2	32.2	+0.1	48 40 30.8	- 0.1	.....	.....	.....	+1 7.5	.....	.....	+ 7 19 18.3
	(i) Sun South L.....	25.2	28.1	+0.1	49 12 26.7	+ 0.5	.....	.....	.....	+1 8.8	.....	.....	+ 6 47 20.5
	(k) α Ursæ Minoris.....	21.9	26.1	-0.1	327 33 24.0	+60.9	43.8	30.09	41.8	-0 37.9	.....	.....	+88 27 9.5
	Mercury Centre.....	19.0	23.0	0.0	39 27 20.9	.....	.....	.....	.....	+0 48.7	.....	.....	+16 32 46.9
	(h) Venus South L.....	53.3	.....	0.0	39 33 55.1	- 0.1	.....	.....	.....	+0 48.9	.....	.....	+16 26 12.6
	(l) Venus North L.....	38.8	42.4	0.0	39 33 40.6	+ 0.2	44.0	30.08	42.7	+0 48.9	.....	.....	+16 26 26.8
	α Hydræ.....	50.7	53.0	+0.1	63 56 51.9	.....	34.1	30.14	37.5	+2 3.4	55.9	.....	- 7 57 58.8
	ι Hydræ.....	25.3	29.0	+0.1	56 24 27.3	.....	.....	.....	.....	+1 31.1	.....	.....	- 0 25 1.9
	α Leonis.....	56.8	61.8	0.0	43 14 59.3	.....	.....	.....	.....	+0 57.1	56.9	.....	+12 45 0.1
	(m) λ^2 Hydræ.....	18.1	22.8	+0.1	67 32 20.5	- 0.4	.....	.....	.....	+2 25.9	.....	.....	-11 33 49.5
	μ Hydræ.....	1.6	4.9	+0.1	71 59 3.4	.....	33.1	30.15	35.9	+3 4.8	.....	.....	-16 1 11.7
	37 Leonis Minoris.....	52.0	57.2	-0.2	23 11 54.3	.....	.....	.....	.....	+0 26.1	.....	.....	+32 48 36.1
	3 Hydræ & Crateris.....	55.4	59.0	+0.1	72 24 57.3	.....	.....	.....	.....	+3 9.7	.....	.....	-16 27 10.5
	* R. A. 10 ^h 53 ^m 53 ^s	57.0	61.0	+0.1	46 15 59.1	.....	.....	.....	.....	+1 3.6	.....	.....	+ 9 43 53.8
	(n) Mars North L.....	25.5	29.3	+0.1	46 16 27.5	+ 0.2	.....	.....	.....	+1 3.6	.....	.....	+ 9 43 25.2
	(o) Mars South L.....	41.5	44.1	+0.1	46 16 42.8	- 0.2	.....	.....	.....	+1 3.6	.....	.....	+ 9 43 10.3
	ι Leonis.....	7.5	13.1	0.0	44 35 10.3	.....	32.0	30.15	35.4	+1 0.0	.....	.....	+11 24 46.2
	β Leonis.....	54.3	58.4	0.0	40 31 56.3	.....	.....	.....	.....	+0 52.1	56.8	.....	+15 28 8.1
	(p) α Ursæ Minoris S. P.	37.8	41.8	0.0	324 29 39.8	-49.8	32.9	30.16	35.0	-0 43.7	56.6	.....	+88 27 9.8
	(h) Jupiter North L.....	59.1	63.3	+0.1	59 44 1.3	+ 0.2	.....	.....	.....	+1 44.0	.....	.....	- 3 44 49.0
	(m) Jupiter South L.....	42.0	45.0	+0.1	59 44 43.6	- 0.2	.....	.....	.....	+1 44.0	.....	.....	- 3 45 30.9
	(q) Groomb. 195 S. P. ...	53.1	58.0	+0.1	322 18 55.7	- 3.6	.....	.....	.....	-0 47.2	.....	.....	+86 17 8.4
	α Ursæ Minoris S. P.	47.0	52.5	0.0	324 28 49.8	.....	.....	.....	.....	-0 43.7	.....	.....	+88 27 9.6
	Pallas.....	24.1	29.0	0.0	39 12 26.5	.....	.....	.....	.....	+0 49.7	.....	.....	+16 47 40.3
	(r) α Ursæ Minoris S. P.	23.4	27.8	0.0	324 29 25.6	-36.2	32.0	30.16	34.9	-0 43.7	.....	.....	+88 27 9.2
April 10	Mercury Centre.....	6.8	10.1	0.0	38 46 8.4	.....	38.1	30.38	38.8	+0 48.6	.....	56.6	+17 13 59.6
	(h) Venus North L.....	50.0	.....	0.0	38 45 52.1	- 0.1	.....	.....	.....	+0 48.6	.....	.....	+17 14 16.0
	Venus South L.....	1.1	5.3	0.0	38 46 3.2	.....	.....	.....	.....	+0 48.6	.....	.....	+17 14 4.8
	ι Hydræ.....	25.0	28.2	+0.1	56 24 26.7	.....	35.0	30.38	38.3	+1 31.6	.....	.....	- 0 25 1.7
	ϵ Leonis.....	33.5	36.3	-0.1	31 29 34.8	.....	.....	.....	.....	+0 37.4	.....	.....	+24 30 44.4
	α Leonis.....	56.4	61.0	0.0	43 14 58.7	.....	.....	.....	.....	+0 57.3	56.5	.....	+12 45 0.6
	(s) Mars Centre.....	44.9	48.9	+0.1	46 13 46.9	- 0.2	35.7	30.39	37.9	+1 3.5	.....	.....	+ 9 46 6.4
	(t) α Ursæ Minoris S. P.	36.4	40.2	0.0	324 29 38.3	-48.5	34.9	30.39	37.8	-0 43.7	58.2	.....	+88 27 9.5
	(u) Jupiter South L.....	47.5	51.0	+0.1	59 38 49.4	+ 0.2	.....	.....	.....	+1 43.9	.....	.....	- 3 39 36.9
	α Ursæ Minoris S. P.	49.3	54.0	0.0	324 28 51.7	.....	.....	.....	.....	-0 43.7	.....	.....	+88 27 11.4
	(x) Pallas.....	23.8	27.9	0.0	38 39 25.9	+ 0.3	.....	.....	.....	+0 48.8	.....	.....	+17 20 41.6
	α Virginis.....	58.0	62.2	+0.1	66 18 0.3	.....	35.0	30.39	37.8	+2 18.2	55.1	.....	-10 19 21.9
	(y) α Ursæ Minoris.....	20.4	25.7	-0.1	327 34 23.0	+ 2.5	41.8	30.33	39.8	-0 38.3	55.9	55.4	+88 27 8.2

(a) At 12^h 58^m 50^s.(b) At 13^h 10^m 1^s.(c) At 13^h 11^m 11^s.

(d) Very tremulous.

(e) At 13^h 33^m 30^s.(f) At 8^h 40^m 40^s.(g) At 0^h 33^m 20^s.

(h) At Wire I.

(i) At 1^h 7^m 43^s.(k) At 1^h 35^m 30^s.(l) 15^s after transit.(m) 30^s after transit.

(n) At Wire II.

(o) 42^s after transit.(p) At 12^h 30^m 56^s.(q) At 12^h 56^m 25^s.(r) At 13^h 27^m 45^s.(s) 48^s after transit.(t) At 12^h 31^m 30^s.(u) 30^s before transit.

(x) At Wire V.

(y) At 1^h 8^m 40^s.

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.		observed.	adopted.									
April 11	(a) Sun South L.....	34.7	38.1	+0.1	48	5	36.5	- 0.1	.....	.....	.....	+1 6.8	.....	55.4	+ 7 54 12.2
	(b) Sun North L.....	40.0	43.5	+0.1	47	33	41.9	+ 0.5	.....	.....	.....	+1 5.5	.....	.....	+ 8 26 7.5
	(c) Venus Centre	35.8	40.1	0.0	38	22	38.0	+ 0.5	44.9	30.31	42.0	+0 47.2	.....	.....	+17 37 29.7
	27 Hydræ.....	30.7	33.0	+0.1	64	51	31.9	.....	45.5	30.25	44.6	+2 5.8	.....	.....	- 8 52 42.3
	(d) α Hydræ.....	52.7	55.5	+0.1	63	56	54.1	- 0.4	.....	.....	.....	+2 0.8	55.0	.....	- 7 57 59.1
	(e) α Ursæ Minoris.....	11.9	17.5	-0.1	327	34	14.6	+10.3	.....	.....	.....	-0 37.1	56.2	56.2	.....
April 12	(f) Sun North L.....	40.5	45.0	+0.1	47	11	42.8	- 0.1	.....	.....	.....	+1 2.8	.....	.....	+ 8 48 10.7
	(g) Sun South L.....	32.0	37.2	+0.1	47	43	34.7	+ 0.6	51.9	30.07	44.3	+1 4.0	.....	.....	+ 8 16 16.9
	(h) Venus South L.....	55.0	.....	0.0	37	59	56.3	- 0.1	.....	.....	.....	+0 45.3	.....	.....	+18 0 14.7
	(i) Venus North L.....	42.9	45.4	0.0	37	59	44.2	+ 0.2	53.0	30.07	48.5	+0 45.3	.....	.....	+18 0 26.5
April 13	Sun South L.....	44.4	47.3	+0.1	47	21	45.9	.....	.....	.....	.....	+1 3.3	.....	54.8	+ 8 38 5.6
	(k) Sun North L.....	48.5	51.5	+0.1	46	49	50.1	+ 1.1	48.6	29.93	47.0	+1 2.1	.....	.....	+ 9 10 1.5
	(l) Venus North L.....	18.3	.....	0.0	37	37	20.1	0.0	.....	.....	.....	+0 44.7	.....	.....	+18 22 50.0
	(e) Venus South L.....*	30.1	33.8	0.0	37	37	31.9	+ 0.5	51.1	29.91	50.0	+0 44.7	.....	.....	+18 22 37.7
	α Tauri.....	11.0	16.0	0.0	39	49	13.5	.....	51.8	29.90	49.9	+0 48.2	55.6	.....	+16 10 53.1
	(i) α Aurigæ.....	52.0	57.9	-0.4	10	10	54.5	0.0	.....	.....	.....	+0 10.4	54.1	.....	+45 49 49.9
	β Tauri.....	18.0	24.2	-0.1	27	32	20.9	.....	52.0	29.89	50.8	+0 30.1	53.8	.....	+28 28 3.8
	(i) Mars Centre	49.6	54.2	+0.1	46	11	51.9	- 0.1	44.0	29.91	46.2	+1 1.4	.....	.....	+ 9 48 1.6
	(m) α Ursæ Minoris S. P.	44.9	49.0	0.0	324	28	47.0	- 1.1	44.2	29.91	45.2	-0 42.2	55.7	.....	+88 27 8.9
April 17	(n) μ Hydræ.....	13.2	16.5	+0.1	71	59	15.0	- 1.3	40.8	28.88	43.4	+2 54.0	.....	55.0	-16 1 12.7
	(l) Mars South L.....	39.7	43.4	+0.1	46	13	41.7	+ 0.1	.....	.....	.....	+0 59.7	.....	.....	+ 9 46 13.5
	(o) Mars North L.....	27.2	31.8	+0.1	46	13	29.6	- 0.2	.....	.....	.....	+0 59.7	.....	.....	+ 9 46 25.9
	δ Leonis	2.0	6.7	0.0	34	36	4.3	.....	40.9	28.88	42.4	+0 39.5	55.4	.....	+21 24 11.2
	δ Hydræ & Crateris...	1.1	4.0	+0.1	69	53	2.7	.....	.....	.....	.....	+2 34.9	54.9	.....	-13 54 42.6
	ι Leonis.....	10.8	16.0	0.0	44	35	13.4	.....	.....	.....	.....	+0 56.4	.....	.....	+11 24 45.2
	β Leonis.....	54.9	59.5	0.0	40	31	57.1	.....	.....	.....	.....	+0 49.0	55.2	.....	+15 28 8.9
	(p) α Ursæ Minoris S. P.	30.7	35.1	0.0	324	29	32.9	-50.8	40.0	28.89	41.4	-0 41.1	54.4	.....	+88 27 6.0
	(q) Jupiter North L.....	30.2	33.5	+0.1	59	18	32.0	0.0	.....	.....	.....	+1 36.4	.....	.....	- 3 19 13.4
	(r) Jupiter South L.....	12.4	15.9	+0.1	59	19	14.3	- 0.6	.....	.....	.....	+1 36.4	.....	.....	- 3 19 55.1
	(s) Groomb. 195 S. P....	39.9	44.9	+0.1	322	18	42.5	- 0.7	.....	.....	.....	-0 44.5	.....	.....	+86 17 2.3
	α Ursæ Minoris S. P.	40.2	44.9	0.0	324	28	42.6	.....	40.0	28.90	41.3	-0 41.1	.....	.....	+88 27 6.5
	April 18	(t) Venus North L.....	39.6	0.0	35	52	41.6	+ 0.1	+0 41.1	55.9	+20 7 33.1
Venus South L.....		52.3	56.1	0.0	35	52	54.3	.....	44.6	28.93	44.7	+0 41.1	.....	.....	+20 7 20.5
δ Orionis		53.0	57.9	+0.1	56	24	55.6	.....	.....	.....	.....	+1 25.4	57.3	.....	- 0 25 25.1
ε Orionis.....		0.8	5.0	+0.1	57	18	3.1	.....	45.3	28.94	45.5	+1 28.3	55.8	.....	- 1 18 35.5
α Orionis		29.8	33.9	+0.1	48	37	31.9	.....	.....	.....	.....	+1 4.6	55.4	.....	+ 7 22 19.4
(u) Moon South L.....		56.0	61.0	-0.1	28	8	58.4	- 0.5	43.0	28.97	44.9	+0 30.6	.....	.....	+27 51 27.4
(x) α Ursæ Minoris S. P.		33.0	37.6	0.0	324	29	35.3	-51.7	37.7	29.01	39.8	-0 41.5	55.0	.....	+88 27 6.2
(t) Jupiter South L.....		31.8	34.2	+0.1	59	16	33.1	+ 0.2	.....	.....	.....	+1 37.1	.....	.....	- 3 17 14.5
(c) Jupiter North L.....		46.3	50.3	+0.1	59	15	48.4	- 0.3	.....	.....	.....	+1 37.1	.....	.....	- 3 16 29.3
Pallas		39.8	44.0	0.0	36	43	41.9	.....	.....	.....	.....	+0 43.2	.....	.....	+19 16 30.8
α Ursæ Minoris S. P.		40.2	45.0	0.0	324	28	42.6	.....	.....	.....	.....	-0 41.5	.....	.....	+88 27 5.2
Ceres.....		40.8	43.1	+0.1	47	37	42.1	.....	.....	.....	.....	+1 3.4	.....	.....	+ 8 22 10.4
Groombridge 2007 ...		47.1	51.2	-0.1	330	25	49.0	.....	37.8	29.02	39.6	-0 33.0	.....	.....	+85 35 39.9
April 19	α Orionis.....	29.0	32.2	+0.1	48	37	30.6	.....	47.0	29.24	45.9	+1 4.8	54.4	54.4	.....
April 20	(t) Sun North L.....	10.1	15.4	0.0	44	21	12.7	0.0	.....	.....	.....	+0 56.4	.....	54.6	+11 38 45.5
	(e) Sun South L.....	58.9	63.0	0.0	44	53	1.0	+ 0.4	48.9	29.66	48.0	+0 57.5	.....	.....	+11 6 55.7
	(y) Venus South L.....	36.0	.....	0.0	35	14	38.4	+ 0.2	.....	.....	.....	+0 40.8	.....	.....	+20 45 35.2
	(r) Venus North L.....	23.0	27.7	0.0	35	14	25.4	+ 0.9	49.8	29.68	48.8	+0 40.8	.....	.....	+20 45 47.5
	α Ursæ Minoris S. P.	39.5	44.9	0.0	324	28	42.2	.....	42.0	29.81	43.2	-0 42.3	54.4	.....	+88 27 5.3
(a) At 1 ^h 17 ^m 21 ^s .		(f) At 1 ^h 21 ^m 14 ^s .		(l) 10 ^s before transit.		(p) At 12 ^h 30 ^m 16 ^s .		(t) At Wire I.							
(b) At 1 ^h 18 ^m 56 ^s .		(g) At 1 ^h 22 ^m 50 ^s .		(m) At 13 ^h 5 ^m 30 ^s .		(q) 5 ^s after transit.		(u) At 6 ^h 14 ^m 28 ^s .							
(c) At Wire V.		(h) 24 ^s before transit.		(n) 1 ^m 15 ^s after transit.		(r) 1 ^m after transit.		(x) At 12 ^h 30 ^m 6 ^s .							
(d) 30 ^s after transit.		(i) At Wire IV.		(o) 54 ^s after transit.		(s) At 12 ^h 53 ^m 0 ^s .		(y) 48 ^s before transit.							
(e) At 1 ^h 15 ^m 50 ^s .		(k) At 1 ^h 27 ^m 3 ^s .													

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.		Equatorial Point		Apparent Declination observed.
		I.	II.		°	'	"					'	"	observed.	adopted.	
April 20	Ceres.....	33.8	37.0	+0.1	47	35	35.5	.....	.....	.....	.....	+1	4.5	.....	54.6	+ 8 24 14.6
	ζ Ursæ Majoris.....	57.2	62.8	-0.5	0	14	59.5	.....	.....	.....	.....	+0	0.2	54.7	.....	+55 45 54.9
	(a) α Ursæ Minoris S. P.	1.1	6.5	0.0	324	29	3.8	-20.7	.....	.....	.....	-0	42.3	.....	.....	+88 27 6.2
April 21	(b) Moon North L.	32.7	34.6	0.0	36	24	33.7	+ 9.4	.....	.....	.....	+0	42.9	.....	56.0	+19 35 30.0
	(c)	49.4	52.7	0.0	36	24	51.1	- 7.2	49.1	29.86	48.2	+0	42.9	.....	.....	+19 35 29.2
	α Hydræ.....	56.6	58.0	+0.1	63	56	57.3	.....	.....	.....	.....	+1	58.4	56.1	.....	- 7 57 59.7
	λ Leonis.....	49.8	53.1	-0.1	32	19	51.4	.....	.....	.....	.....	+0	36.8	.....	.....	+23 40 27.8
	ψ Leonis.....	47.8	51.5	0.0	41	14	49.7	.....	.....	.....	.....	+0	51.0	.....	.....	+14 45 15.3
	ε Leonis.....	33.3	36.8	-0.1	31	29	35.0	.....	.....	.....	.....	+0	35.7	.....	.....	+24 30 45.3
	α Leonis	57.8	62.0	0.0	43	14	59.9	.....	48.0	29.87	48.6	+0	54.8	55.8	.....	+12 45 1.3
April 23	(d) Venus North L.	10.0	....	0.0	34	21	13.1	+ 0.1	.....	.....	.....	+0	39.6	.....	55.4	+21 39 2.6
	Venus South L.	20.0	26.2	0.0	34	21	23.1	.....	47.0	29.67	46.8	+0	39.6	.....	.....	+21 38 52.7
	α Tauri.....	10.3	15.3	0.0	39	49	12.8	.....	.....	.....	.....	+0	48.4	55.1	.....	+16 10 54.2
	α Aurigæ.....	54.1	60.6	-0.4	10	10	56.9	.....	.....	.....	.....	+0	10.4	55.3	.....	+45 49 48.1
	(e) β Tauri.....	20.1	26.0	-0.1	27	32	22.9	- 0.1	45.5	29.68	47.0	+0	30.4	55.5	.....	+28 28 2.2
	(f) γ Leonis.....	0.7	7.0	0.0	35	21	3.8	0.0	44.8	29.74	45.8	+0	41.4	.....	.....	+20 39 10.2
	(g) α Ursæ Minoris S. P.	21.5	26.9	0.0	324	29	24.2	-41.0	42.0	29.76	45.2	-0	42.2	55.9	.....	+88 27 5.6
April 24	(d) Sun South L.....	3.6	8.8	0.0	43	32	6.1	0.0	.....	.....	.....	+0	55.7	.....	55.5	+12 27 53.7
	(h) Sun North L.....	12.9	18.1	0.0	43	0	15.5	+ 0.6	44.2	29.83	45.2	+0	54.7	.....	.....	+12 59 44.7
	(i) Venus South L.	46.6	....	-0.1	34	4	49.0	0.0	.....	.....	.....	+0	39.5	.....	.....	+21 55 27.0
	(e) Venus North L.	32.9	37.5	-0.1	34	4	35.3	+ 0.1	45.7	29.81	46.0	+0	39.5	.....	.....	+21 55 40.6
	α Tauri.....	10.5	16.6	0.0	39	49	13.3	.....	.....	.....	.....	+0	48.7	55.9	.....	+16 10 53.5
	α Canis Majoris	55.5	60.9	+0.1	72	27	58.4	.....	46.0	29.79	46.7	+3	2.5	55.2	.....	-16 30 5.4
	(k) δ Hydræ & Crateris...	57.8	61.4	+0.1	69	52	59.8	- 1.0	42.0	29.77	45.1	+2	39.2	55.0	.....	-13 54 42.5
	τ Leonis	16.0	21.6	+0.1	52	15	18.6	.....	.....	.....	.....	+1	15.9	.....	.....	+ 3 44 21.0
	(l) Moon North L.	20.0	25.7	+0.1	52	51	22.9	+ 8.6	.....	.....	.....	+1	17.6	.....	.....	+ 3 8 6.4
	(m)	39.9	44.6	+0.1	52	51	42.0	-11.2	.....	.....	.....	+1	17.6	.....	.....	+ 3 8 7.1
	β Virginis.....	28.3	33.0	+0.1	53	19	30.8	.....	.....	.....	.....	+1	18.9	.....	.....	+ 2 40 5.8
	ο Virginis.....	25.0	29.1	+0.1	46	22	27.1	.....	.....	.....	.....	+1	1.7	.....	.....	+ 9 37 26.7
	(n) α Ursæ Minoris S. P.	28.9	33.0	0.0	324	29	31.0	-48.4	42.0	29.78	45.3	-0	42.2	56.0	.....	+88 27 4.9
	(d) Jupiter North L.....	20.2	24.1	+0.1	59	0	22.2	+ 0.2	.....	.....	.....	+1	37.6	.....	.....	- 3 1 4.5
	(o) Jupiter South L.....	1.6	5.9	+0.1	59	1	3.8	- 0.3	.....	.....	.....	+1	37.6	.....	.....	- 3 1 45.6
	α Ursæ Minoris S. P.	40.5	46.0	0.0	324	28	43.3	.....	42.8	29.78	45.2	-0	42.2	.....	.....	+88 27 5.6
April 25	α Canis Majoris.....	1.8	6.0	+0.1	72	28	4.1	.....	55.2	29.66	53.3	+2	58.2	56.7	56.7	.....
April 26	α Leonis.....	55.8	61.9	0.0	43	14	58.9	.....	44.7	29.83	48.8	+0	55.1	55.3	55.7	+12 45 1.7
	Mars Centre	1.9	8.0	+0.1	46	34	5.1	.....	45.9	29.84	47.0	+1	1.7	.....	.....	+ 9 25 48.9
	δ Leonis	0.7	6.0	0.0	34	36	3.3	.....	.....	.....	.....	+0	40.4	56.2	.....	+21 24 12.0
	β Leonis	54.0	58.0	0.0	40	31	55.9	.....	.....	.....	.....	+0	50.1	55.9	.....	+15 28 9.7
	(e) γ Virginis.....	33.0	38.0	+0.1	56	33	35.6	- 0.2	44.0	29.83	44.9	+1	28.7	.....	.....	- 0 34 8.4
	Jupiter Centre.....	51.6	55.1	+0.1	58	55	53.4	.....	.....	.....	.....	+1	37.2	.....	.....	- 2 56 34.9
	ψ Virginis.....	52.9	56.5	+0.1	64	38	54.8	.....	.....	.....	.....	+2	3.4	.....	.....	- 8 40 2.5
	(p) Moon North L.	16.1	19.9	+0.1	64	31	18.1	+ 9.4	.....	.....	.....	+2	2.8	.....	.....	- 8 32 34.6
	(q)	34.8	37.7	+0.1	64	31	36.3	-10.3	.....	.....	.....	+2	2.8	.....	.....	- 8 32 33.1
	α Ursæ Minoris S. P.	39.2	43.5	0.0	324	28	41.4	.....	.....	.....	.....	-0	42.2	55.0	.....	+88 27 3.5
	Ceres	12.7	16.9	+0.1	47	34	14.9	.....	.....	.....	.....	+1	4.3	.....	.....	+ 8 25 36.5
April 27	α Virginis.....	4.2	8.8	+0.1	66	18	6.7	.....	.....	.....	.....	+2	13.5	56.1	.....	-10 19 24.5
	Groombridge 2007 ...	45.0	50.1	-0.1	330	25	47.4	.....	42.6	29.84	43.9	-0	33.6	.....	.....	+85 35 41.9
	(r) Sun North L.....	45.5	50.1	0.0	42	1	47.7	+ 0.1	.....	.....	.....	+0	52.3	.....	55.5	+13 58 15.4
	(s) Sun South L.....	32.8	36.6	0.0	42	33	31.7	+ 0.5	49.9	29.86	49.5	+0	53.3	.....	.....	+13 26 27.0
	(t) Venus Centre	27.8	32.9	-0.1	33	18	30.3	+ 0.4	50.8	29.86	50.6	+0	38.1	.....	.....	+22 41 46.7
	δ Leonis	1.0	6.0	0.0	34	36	3.5	.....	47.8	29.90	48.0	+0	40.3	56.4	.....	+21 24 11.7
<div>(a) At 13^h 21^m 20^s. (e) At Wire IV. (i) At Wire II. (u) At 12^h 31^m 35^s. (r) At 2^h 16^m 53^s.</div> <div>(b) At 9^h 9^m 47^s. (f) 48^s after transit. (h) 1^m after transit. (o) At Wire V. (s) At 2^h 18^m 28^s.</div> <div>(c) At 9^h 11^m 11^s. (g) At 12^h 33^m 55^s. (l) At 11^h 29^m 32^s. (p) At 12^h 55^m 37^s. (t) At Wire V.: cloudy.</div> <div>(d) At Wire I. (h) 57^s after transit. (m) At 11^h 30^m 53^s. (q) At 12^h 57^m 0^s.</div>																

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
April 27	(a) Ceres	41.9	46.3	+0.1	47 34 44.2	- 0.2	.....	In.	.....	+ 1 4.0	.....	55.5	+ 8 25 7.5
	(b) α Ursæ Minoris S. P.	42.0	48.0	0.0	324 28 45.0	- 4.5	46.1	29.91	47.0	- 0 42.0	54.5	.....	+ 88 27 3.0
	α Virginis	3.5	7.9	+0.1	66 18 5.9	.....	.....	.....	.....	+ 2 12.7	54.5	.....	- 10 19 23.1
	(c) Moon North L.	38.1	42.3	+0.1	69 59 40.3	+ 9.7	.....	.....	.....	+ 2 39.6	.....	.....	- 14 1 34.1
	(d) Moon South L.	32.8	36.9	+0.1	70 29 35.0	- 10.0	.....	.....	.....	+ 2 43.9	.....	.....	- 14 31 13.4
	η Bootis	57.0	61.8	0.0	36 47 59.5	.....	45.7	29.91	46.4	+ 0 43.9	56.6	.....	+ 19 12 12.1
April 29	(e) ϵ Bootis	14.7	20.8	-0.1	28 15 17.6	+ 0.3	48.5	29.71	48.9	+ 0 31.1	55.6	54.8	+ 27 45 5.8
	β Ursæ Minoris	36.6	42.6	-0.4	341 12 39.3	.....	.....	.....	.....	- 0 19.8	54.1	.....	+ 74 48 35.3
April 30	Jupiter Centre	49.0	54.0	+0.1	58 46 51.5	.....	53.0	29.63	53.2	+ 1 34.1	.....	54.0	- 2 47 31.6
	12 Canum Venat.	21.2	25.2	-0.3	16 49 22.9	.....	.....	.....	.....	+ 0 17.3	54.1	.....	+ 39 11 13.8
	(f) Pallas	5.0	10.2	0.0	34 41 7.6	+ 0.2	.....	.....	.....	+ 0 39.6	.....	.....	+ 21 19 6.6
	α Ursæ Minoris S. P.	34.6	40.0	0.0	324 28 37.3	.....	.....	.....	.....	- 0 41.0	53.1	.....	+ 88 27 2.3
	Ceres	27.9	32.2	+0.1	47 37 30.1	.....	.....	.....	.....	+ 1 2.7	.....	.....	+ 8 22 21.2
	(g) α Virginis	7.4	12.1	+0.1	66 18 9.9	+ 0.2	.....	.....	.....	+ 2 9.7	55.6	.....	- 10 19 25.8
	(f) ζ Ursæ Majoris	52.9	58.9	-0.5	0 14 55.4	+ 0.7	52.3	29.63	52.9	+ 0 0.2	53.3	.....	+ 55 45 57.7
	(h) Sun South L.	39.9	45.4	0.0	41 18 42.7	+ 0.2	59.1	29.63	57.2	+ 0 49.6	.....	54.4	+ 14 41 21.9
May 2	(g) Sun South L.	32.4	36.3	0.0	41 0 34.3	0.0	.....	.....	.....	+ 0 50.5	.....	54.8	+ 14 59 30.0
	(i) Sun North L.	46.4	50.9	0.0	40 28 48.7	+ 1.2	47.3	29.76	49.0	+ 0 49.6	.....	.....	+ 15 31 15.3
	Mars Centre	13.9	19.6	+0.1	46 59 16.9	.....	45.0	29.71	48.5	+ 1 2.5	.....	.....	+ 9 0 35.4
	δ Leonis	57.9	65.1	0.0	34 36 1.5	.....	.....	.....	.....	+ 0 40.3	54.9	.....	+ 21 24 13.0
	(k) δ Hydræ & Crateris ..	57.6	61.2	+0.1	69 52 59.6	- 0.2	.....	.....	.....	+ 2 38.0	54.1	.....	- 13 54 42.6
	β Leonis	51.2	57.0	0.0	40 31 54.0	.....	.....	.....	.....	+ 0 49.9	54.4	.....	+ 15 28 10.9
	(l) α Ursæ Minoris S. P.	20.3	25.2	0.0	324 29 22.8	- 42.5	43.0	29.68	47.8	- 0 42.0	56.0	.....	+ 88 27 3.5
	(g) Jupiter South L.	54.5	60.7	+0.1	58 42 57.8	+ 0.2	.....	.....	.....	+ 1 36.1	.....	.....	- 2 43 39.3
	(f) Jupiter North L.	13.4	19.8	+0.1	58 42 16.6	- 0.3	.....	.....	.....	+ 1 36.1	.....	.....	- 2 42 57.6
	Pallas	26.9	32.0	0.0	34 26 29.4	.....	.....	.....	.....	+ 0 40.2	.....	.....	+ 21 33 45.2
	Ceres	16.5	21.2	+0.1	47 40 18.9	.....	.....	.....	.....	+ 1 4.3	.....	.....	+ 8 19 31.6
	(m) α Ursæ Minoris S. P.	40.0	45.1	0.0	324 28 42.6	- 1.2	42.5	29.68	47.5	- 0 42.0	.....	.....	+ 88 27 4.6
May 6	(n) α Canis Majoris	54.4	61.0	+0.1	72 27 57.9	- 0.4	42.8	29.88	45.7	+ 3 4.3	57.2	54.8	- 16 30 7.0
	α Ursæ Majoris	42.5	48.2	-0.6	353 23 44.8	.....	.....	.....	.....	- 0 7.0	52.8	.....	+ 62 37 17.0
	Mars Centre	29.5	34.2	+0.1	47 20 31.9	.....	40.0	29.87	44.4	+ 1 4.3	.....	.....	+ 8 39 18.6
	δ Leonis	56.7	62.2	0.0	34 35 59.4	.....	.....	.....	.....	+ 0 40.9	53.7	.....	+ 21 24 14.5
	(o) α Ursæ Minoris S. P.	12.0	16.1	0.0	324 29 14.1	- 35.2	.....	.....	.....	- 0 42.5	55.3	.....	+ 88 27 1.6
	(g) Jupiter South L.	8.0	12.1	+0.1	58 35 10.1	+ 0.3	.....	.....	.....	+ 1 36.8	.....	.....	- 2 35 52.4
	(f) Jupiter North L.	27.4	31.7	+0.1	58 34 29.7	- 0.3	.....	.....	.....	+ 1 36.8	.....	.....	- 2 35 11.4
	Pallas	55.8	61.1	-0.1	34 1 58.3	.....	.....	.....	.....	+ 0 40.0	.....	.....	+ 21 58 16.5
	Ceres	21.5	24.9	+0.1	47 48 23.4	.....	.....	.....	.....	+ 1 5.4	.....	.....	+ 8 11 26.0
	(p) α Ursæ Minoris S. P.	39.0	43.1	0.0	324 28 41.1	- 0.4	.....	.....	.....	- 0 42.5	.....	.....	+ 88 27 3.4
	(q)	30.2	34.9	0.0	324 29 32.6	- 53.4	39.7	29.87	43.0	- 0 42.5	.....	.....	+ 88 27 1.9
	(r) Moon North L.	20.6	25.0	+0.1	72 32 22.8	- 6.8	.....	.....	.....	+ 3 6.4	.....	54.9	- 16 34 27.5
	(s)	5.5	10.7	+0.1	72 32 8.1	+ 9.8	38.5	29.83	44.9	+ 3 6.4	.....	.....	- 16 34 29.4
	α Aquarii	21.5	24.1	+0.1	57 5 22.9	.....	.....	.....	.....	+ 1 31.5	53.9	.....	- 1 5 59.5
May 7	(a) α Ursæ Majoris	44.3	49.1	-0.6	353 23 46.1	+ 0.2	.....	.....	.....	- 0 6.9	54.5	.....	+ 62 37 15.5
	Mars Centre	23.9	28.1	+0.1	47 26 26.1	.....	44.0	29.72	48.1	+ 1 3.6	.....	.....	+ 8 33 25.2
	δ Leonis	59.0	64.8	0.0	34 36 1.9	.....	.....	.....	.....	+ 0 40.3	55.7	.....	+ 21 24 12.7
	β Leonis	52.0	57.1	0.0	40 31 54.5	.....	44.0	29.72	47.4	+ 0 50.0	55.4	.....	+ 15 28 10.4
May 9	α Ursæ Majoris	43.8	49.0	-0.6	353 23 45.8	.....	.....	.....	.....	- 0 7.0	54.1	54.4	+ 62 37 15.6
	Mars Centre	44.0	46.9	+0.1	47 38 45.6	.....	39.7	29.86	43.9	+ 1 5.0	.....	.....	+ 8 21 3.8
	δ Leonis	58.2	63.0	0.0	34 36 0.6	.....	.....	.....	.....	+ 0 40.9	55.2	.....	+ 21 24 12.9
	δ Hydræ & Crateris ..	56.1	58.9	+0.1	69 52 57.7	.....	.....	.....	.....	+ 2 40.6	54.8	.....	- 13 54 43.9
<div> <div>(a) At Wire IV.</div> <div>(b) At 13^h 11^m 12^s.</div> <div>(c) At 13^h 39^m 54^s.</div> </div> <div> <div>(d) At 13^h 41^m 25^s; both limbs enlightened.</div> <div>(e) 1^m after transit.</div> <div>(f) At Wire V.</div> </div> <div> <div>(g) At Wire I.</div> <div>(h) 24^s after transit.</div> <div>(i) At 2^h 37^m 18^s.</div> <div>(k) 15^s after transit.</div> </div> <div> <div>(l) At 12^h 33^m 0^s.</div> <div>(m) At 13^h 6^m 0^s.</div> <div>(n) 30^s after transit.</div> <div>(o) At 12^h 35^m 50^s.</div> </div> <div> <div>(p) At 13^h 4^m 20^s.</div> <div>(q) At 13^h 33^m 20^s.</div> <div>(r) Faint: at 21^h 48^m 51^s.</div> <div>(s) Faint: at 21^h 50^m 6^s.</div> </div>													

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
May 9	(a) α Ursæ Minoris S. P.	14.5	19.0	0.0	324 29 16.8	-38.8	.....	.....	.....	-0 42.7	53.6	54.4	+88 27 0.9
	(b) Jupiter North L.	16.0	....	+0.1	58 29 18.0	+ 0.3	.....	.....	.....	+1 36.8	.....	.....	- 2 30 0.7
	(c) Jupiter South L.	57.3	61.1	+0.1	58 29 59.3	- 0.3	38.7	29.88	43.0	+1 36.8	.....	.....	- 2 30 41.4
	(d) Pallas	30.9	34.0	-0.1	33 47 32.3	0.0	.....	.....	.....	+0 39.8	.....	.....	+22 12 42.3
	Ceres	31.0	34.4	+0.1	47 56 32.8	.....	.....	.....	.....	+1 5.9	.....	.....	+ 8 3 15.7
	α Ursæ Minoris S. P.	36.0	39.2	0.0	324 28 37.6	.....	.....	.....	.....	-0 42.7	.....	.....	+88 27 0.5
	(c)	18.0	22.9	0.0	324 29 20.5	-44.1	38.2	29.89	43.0	-0 42.7	.....	.....	+88 26 59.3
May 10	α Tauri	10.4	16.1	0.0	39 49 13.3	.....	44.8	29.97	45.9	+0 49.1	56.5	55.5	+16 10 53.1
	α Aurigæ	56.3	61.2	-0.4	10 10 58.3	.....	.....	.....	.....	+0 10.5	54.6	.....	+45 49 46.7
	β Tauri	21.0	26.0	-0.1	27 32 23.3	.....	.....	.....	.....	+0 30.7	55.5	.....	+28 23 1.5
	(b) Venus North L.	54.5	....	-0.1	31 4 57.1	+ 0.5	.....	.....	.....	+0 35.5	.....	.....	+24 55 22.4
	Venus South L.	7.7	13.2	-0.1	31 5 10.3	.....	44.1	29.95	45.8	+0 35.5	.....	.....	+24 55 9.7
	β Ursæ Majoris	7.5	13.5	-0.6	358 46 9.9	.....	41.9	30.00	44.3	-0 1.3	.....	.....	+57 14 46.9
May 11	(f) Sun North L.	39.2	42.4	0.0	37 57 40.7	- 0.3	.....	.....	.....	+0 45.6	.....	54.8	+18 2 28.8
	(g) Sun South L.	18.7	23.9	0.0	38 29 21.3	+ 0.5	47.0	29.89	46.0	+0 46.5	.....	.....	+17 30 46.5
	(b) Venus South L.	39.2	....	-0.1	30 59 40.5	+ 0.5	.....	.....	.....	+0 34.7	.....	.....	+25 0 39.1
	Venus North L.	25.6	28.3	-0.1	30 59 26.9	.....	51.8	29.84	49.5	+0 34.7	.....	.....	+25 0 53.2
	α Canis Minoris	44.9	50.5	+0.1	50 21 47.7	.....	53.9	29.82	51.8	+1 9.3	54.6	.....	+ 5 37 57.8
	β Leonis	52.4	57.0	0.0	40 31 54.6	.....	.....	.....	.....	+0 50.1	56.0	.....	+15 28 10.1
	γ Ursæ Majoris	24.0	29.3	-0.5	1 25 26.1	.....	45.0	29.87	47.5	+0 1.4	54.7	.....	+54 35 27.3
	(h) α Ursæ Minoris S. P.	12.9	19.1	0.0	324 29 16.0	-38.1	.....	.....	.....	-0 42.2	53.8	.....	+88 27 0.9
	(b) Jupiter South L.	48.0	51.7	+0.1	58 26 49.9	+ 0.3	.....	.....	.....	+1 35.4	.....	.....	- 2 27 30.8
	(c) Jupiter North L.	7.5	12.9	+0.1	58 26 10.3	- 0.3	43.7	29.85	46.5	+1 35.4	.....	.....	- 2 26 50.6
	Pallas	41.0	46.0	-0.1	33 39 43.4	.....	.....	.....	.....	+0 39.2	.....	.....	+22 20 32.2
	Ceres	54.0	59.2	+0.1	48 2 56.8	.....	.....	.....	.....	+1 5.4	.....	.....	+ 7 56 52.6
	α Ursæ Minoris S. P.	32.7	38.0	0.0	324 28 35.4	.....	.....	.....	.....	-0 42.2	.....	.....	+88 26 58.4
	(i)	20.9	26.2	0.0	324 29 23.6	-47.0	43.0	29.87	46.0	-0 42.2	.....	.....	+88 26 59.6
May 13	Mars Centre	50.0	54.2	+0.1	48 5 52.2	.....	.....	.....	.....	+1 5.4	.....	54.7	+ 7 53 57.1
	δ Leonis	57.8	63.5	0.0	34 36 0.6	.....	37.5	29.44	45.2	+0 40.5	55.2	.....	+21 24 13.6
	δ Hydræ & Crateris ..	57.5	60.7	+0.1	69 52 59.3	.....	.....	.....	.....	+2 39.0	54.8	.....	-13 54 43.6
	β Leonis	51.0	54.0	0.0	40 31 52.4	.....	.....	.....	.....	+0 50.3	54.2	.....	+15 28 12.0
	(k) α Ursæ Minoris S. P.	22.9	26.2	0.0	324 29 24.6	-47.8	35.6	29.45	40.8	-0 42.4	51.7	.....	+88 26 59.7
	Jupiter North L.	13.1	16.1	+0.1	58 23 14.8	.....	.....	.....	.....	+1 35.7	.....	.....	- 2 23 55.8
	Pallas	16.9	20.1	-0.1	33 33 18.5	.....	.....	.....	.....	+0 39.2	.....	.....	+22 26 57.0
	Ceres	3.8	7.3	+0.1	48 10 5.6	.....	.....	.....	.....	+1 5.9	.....	.....	+ 7 49 43.2
	α Ursæ Minoris S. P.	36.3	40.0	0.0	324 28 38.2	.....	.....	.....	.....	-0 42.4	.....	.....	+88 27 1.1
	(l)	13.4	19.2	0.0	324 29 16.3	-39.4	34.8	29.44	39.3	-0 42.4	.....	.....	+88 26 59.8
	Groomb. 642 S. P. ...	1.0	6.4	+0.1	322 9 3.8	.....	.....	.....	.....	-0 46.2	.....	.....	+86 7 22.9
	A. S. C. 1752	45.2	46.1	+0.1	72 39 45.8	.....	33.7	29.43	37.0	+3 7.5	.....	.....	-16 41 58.6
	Groombridge 2283	35.8	40.9	-0.1	328 11 38.2	.....	.....	.....	.....	-0 36.9	.....	.....	+87 49 53.4
	Groomb. 750 S. P. ...	53.8	58.5	+0.1	321 8 56.3	.....	.....	.....	.....	-0 47.9	.....	.....	+85 7 13.7
	Saturn Centre	7.9	10.0	+0.1	75 41 9.0	.....	33.4	29.42	36.3	+3 48.0	.....	.....	-19 44 2.3
May 14	(m) Groomb. 750 S. P. ...	51.8	57.0	+0.1	321 8 54.5	- 0.1	.....	.....	.....	-0 47.5	.....	56.8	+85 7 10.1
	ζ Ursæ Minoris	20.8	25.0	-0.3	337 44 22.6	.....	33.0	29.12	40.9	-0 24.2	56.8	.....	+78 16 58.4
	δ Ophiuchi	59.9	62.2	+0.1	59 16 1.1	.....	.....	.....	.....	+1 38.4	56.3	.....	- 3 16 42.7
	η Draconis	29.8	33.7	-0.6	354 8 31.2	.....	.....	.....	.....	-0 6.1	57.2	.....	+61 52 31.7
	Saturn Centre	31.5	33.2	+0.1	75 40 32.4	.....	33.0	29.11	39.1	+3 45.6	.....	.....	-19 43 21.2
May 16	(c) α Canis Minoris	47.8	52.0	+0.1	50 21 49.9	- 0.3	.....	.....	.....	+1 8.3	55.7	55.2	+ 5 37 57.3
	(d) β Geminorum	43.7	49.0	-0.1	27 35 46.2	- 0.1	49.8	29.13	47.8	+0 29.6	56.1	.....	+28 24 39.5
	γ Ursæ Majoris	23.9	28.5	-0.5	1 25 25.7	.....	42.7	29.27	44.4	+0 1.4	55.0	.....	+54 35 28.1
	(b) Jupiter South L.	4.2	7.7	+0.1	58 20 6.0	+ 0.3	.....	.....	.....	+1 33.8	.....	.....	- 2 20 44.9
	(c) Jupiter North L.	23.8	27.2	+0.1	58 19 25.6	- 0.3	40.9	29.29	42.5	+1 33.8	.....	.....	- 2 20 3.9
	Pallas	7.9	12.4	-0.1	33 26 10.0	.....	.....	.....	.....	+0 38.3	.....	.....	+22 34 6.9
(a) At 12 ^h 34 ^m 45 ^s .		(d) At Wire IV.		(g) At 3 ^h 12 ^m 10 ^s .		(k) At 12 ^h 32 ^m 10 ^s .							
(b) At Wire I.		(e) At 13 ^h 30 ^m 40 ^s .		(h) At 12 ^h 35 ^m 10 ^s .		(l) At 13 ^h 29 ^m 20 ^s .							
(c) At Wire V.		(f) At 3 ^h 10 ^m 26 ^s .		(i) At 13 ^h 31 ^m 45 ^s .		(m) At 15 ^h 47 ^m 15 ^s .							

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.	
		I.	II.										observed.	adopted.		
May 27	α Anrigæ	58.5	64.0	-0.4	10	11	0.8	.....	59.4	.....	.....	+0 10.2	54.5	54.9	+45 49 43.9
	Groomb. 642 S. P.	54.9	61.8	+0.1	322	8	58.5	.....	.....	.....	-0 45.1	.....	.....	+86 7 18.5	
	(a) A. S. C. 1752	49.1	53.5	+0.1	72	39	51.4	-0.6	.....	.....	.....	+3 2.7	.....	.....	-16 41 58.6
	α Coronæ borealis	54.2	62.0	-0.1	28	44	58.0	.....	53.0	29.93	53.8	+0 31.7	55.1	.....	+27 15 25.2
	Groombridge 2283	28.5	34.9	-0.1	328	11	31.6	.....	.....	.....	.....	-0 36.0	.....	.....	+87 49 59.3
	α Serpentis	48.5	54.1	+0.1	49	3	51.4	.....	.....	.....	.....	+1 6.5	55.2	.....	+6 55 57.0
	(b) Groomb. 750 S. P. ...	45.3	53.0	+0.1	321	8	49.3	-1.1	.....	.....	.....	-0 46.7	.....	.....	+85 7 6.6
	(c) Moon North L.	6.2	10.8	+0.1	81	28	8.7	+5.7	.....	.....	.....	+6 6.4	.....	.....	-25 33 25.9
	(d) Moon South L.	48.2	51.6	+0.1	81	57	50.1	-9.1	.....	.....	.....	+6 27.0	.....	.....	-26 3 13.1
	(e) Saturn Centre	51.5	58.2	+0.1	75	31	54.9	-0.8	52.2	29.93	53.2	+3 40.2	.....	.....	-19 34 39.4
May 28	(f) Sun North L.	21.0	27.0	0.0	34	20	24.0	+0.3	.....	.....	.....	+0 39.3	.....	56.5	+21 39 52.9
	(a) Sun South L.	56.0	62.8	0.0	34	51	59.3	+0.2	56.5	29.99	55.5	+0 40.0	.....	.....	+21 8 17.0
	(g) α Aurigæ	59.1	65.0	-0.4	10	11	1.6	0.0	.....	.....	.....	+0 10.3	55.3	.....	+45 49 44.6
	α Bootis	58.0	64.0	0.0	35	59	1.0	.....	53.0	30.01	54.1	+0 42.1	56.4	.....	+20 1 13.4
	ϵ Bootis	11.0	18.1	-0.1	28	15	14.4	.....	.....	.....	.....	+0 31.1	57.9	.....	+27 45 11.0
	(h) Groombridge 2283 ...	29.2	35.5	-0.1	328	11	32.4	+0.4	.....	.....	.....	-0 36.1	.....	.....	+87 49 59.8
	Mercury Centre	58.6	63.2	0.0	43	22	0.8	.....	50.9	30.05	53.3	+0 55.0	.....	55.5	+12 37 59.7
May 29	(f) Sun South L.	18.0	24.9	0.0	34	42	21.4	+0.4	.....	.....	.....	+0 40.3	.....	.....	+21 17 53.4
	(a) Sun North L.	42.5	48.0	-0.1	34	10	45.1	+0.2	51.9	30.05	52.6	+0 39.5	.....	.....	+21 49 30.7
	α Aurigæ	59.5	64.8	-0.4	10	11	1.7	.....	.....	.....	.....	+0 10.4	55.4	.....	+45 49 43.4
	Venus Centre	41.8	46.1	-0.1	31	20	43.8	.....	52.0	30.04	52.6	+0 35.4	.....	.....	+24 39 36.3
	α Canis Minoris	45.2	50.8	+0.1	50	21	48.0	.....	.....	.....	.....	+1 10.1	56.6	.....	+5 37 57.4
	β Geminorum	41.2	47.7	-0.1	27	35	44.3	.....	.....	.....	.....	+0 30.4	54.8	.....	+28 24 40.8
	α Ursæ Minoris S. P. ...	32.1	37.8	0.0	324	28	35.0	.....	46.0	30.03	49.8	-0 42.2	55.2	.....	+88 26 57.3
	Mercury Centre	59.0	63.6	0.0	42	56	1.3	.....	46.8	30.03	49.8	+0 54.6	.....	55.8	+13 3 59.9
May 30	Sun North L.	25.2	30.9	-0.1	34	1	27.9	.....	49.0	30.01	49.5	+0 39.4	.....	.....	+21 58 48.5
	Venus Centre	23.8	28.5	-0.1	31	28	26.1	.....	49.8	29.99	50.5	+0 35.7	.....	.....	+24 31 54.0
	α Canis Minoris	45.1	50.1	+0.1	50	21	47.6	.....	.....	.....	.....	+1 10.3	56.4	.....	+5 37 57.9
	β Geminorum	41.9	47.9	-0.1	27	35	44.8	.....	.....	.....	.....	+0 30.5	55.3	.....	+28 24 40.5
May 31	(i) Venus Centre	48.9	53.0	-0.1	31	36	50.8	-0.2	48.0	29.90	48.5	+0 35.9	.....	55.7	+24 23 29.2
	(k) α Canis Minoris	44.9	49.9	+0.1	50	21	47.4	+0.2	.....	.....	.....	+1 10.4	56.6	.....	+5 37 57.7
	β Geminorum	43.4	49.2	-0.1	27	35	46.2	.....	.....	.....	.....	+0 30.5	56.7	.....	+28 24 39.0
	(i) Jupiter Centre	50.9	54.9	+0.1	58	9	53.0	-0.2	43.9	29.86	46.6	+1 34.4	.....	.....	-2 10 31.5
	(l) α Ursæ Minoris S. P. ...	32.9	37.9	0.0	324	28	35.4	-1.1	.....	.....	.....	-0 42.2	54.7	.....	+88 26 56.4
	ζ Ursæ Majoris	47.2	53.5	-0.5	0	14	49.9	.....	.....	.....	.....	+0 0.2	54.9	.....	+55 46 5.6
June 1	Mercury Centre	52.8	57.9	0.0	42	0	55.3	.....	46.0	29.80	48.0	+0 52.6	.....	55.7	+13 59 7.8
	(m) Sun South L.	35.3	39.0	-0.1	34	15	37.0	+0.3	.....	.....	.....	+0 39.7	.....	.....	+21 44 38.7
	(n) Sun North L.	0.7	5.3	-0.1	33	44	2.9	+0.4	46.9	29.77	47.2	+0 38.9	.....	.....	+22 16 13.5
	α Aurigæ	59.8	64.8	-0.4	10	11	1.9	.....	.....	.....	.....	+0 10.4	55.2	.....	+45 49 43.4
	α Orionis	26.9	30.5	+0.1	48	37	28.7	.....	47.2	29.77	47.6	+1 6.0	56.1	.....	+7 22 21.0
	θ Ursæ Majoris	14.2	21.1	-0.5	3	36	17.1	.....	46.0	29.73	48.4	+0 3.6	56.3	.....	+52 24 35.0
	Jupiter Centre	45.8	50.0	+0.1	58	9	48.0	.....	42.6	29.73	45.9	+1 34.3	.....	.....	-2 10 26.6
	α Ursæ Minoris S. P. ...	32.0	37.0	0.0	324	28	34.5	.....	.....	.....	.....	-0 42.1	55.2	.....	+88 26 56.7
	Groomb. 642 S. P.	56.0	63.2	+0.1	322	8	59.7	.....	40.9	29.74	43.7	-0 46.0	.....	.....	+86 7 18.0
June 3	α Canis Minoris	46.9	51.9	+0.1	50	21	49.4	.....	.....	.....	.....	+1 9.1	57.3	56.4	+5 37 57.9
	Venus Centre	51.9	55.8	-0.1	32	5	53.7	.....	.....	.....	.....	+0 35.9	.....	.....	+23 54 26.8
	β Geminorum	42.1	48.7	-0.1	27	35	45.3	.....	47.9	29.36	47.9	+0 30.0	55.2	.....	+28 24 41.1
	ϵ Leonis	32.0	37.1	-0.1	31	29	34.5	.....	50.8	29.34	50.0	+0 34.9	56.6	.....	+24 30 47.0
June 5	(f) Sun North L.	47.6	53.1	-0.1	33	13	50.3	+0.4	.....	.....	.....	+6 36.9	.....	51.5	+22 46 26.9
(a) At Wire V.		tion for defect of illu- mination 2".5.							(f) At Wire I.				(k) At Wire II.			
(b) At 15 ^h 46 ^m 40 ^s .									(g) 15' after transit.				(l) At 13 ^h 6 ^m 35 ^s .			
(c) At 15 ^h 50 ^m 40 ^s : defi- cient limb; Correc-		(d) At 15 ^h 52 ^m 30 ^s .							(h) At 15 ^h 36 ^m 50 ^s .				(m) 30' before transit.			
		(e) 48' after transit.							(i) At Wire IV.				(n) At 4 ^h 36 ^m 10 ^s .			

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
June 5	(a) Sun South L.	21.0	26.0	-0.1	33 45 23.4	+ 0.4	57.9	29.48	57.0	+0 37.6	.....	54.5	+22 14 53.1
	α Aurigæ	59.0	64.3	-0.4	10 11 1.2	.....	.....	.....	.....	+0 10.1	53.7	.....	+45 49 43.2
	α Orionis *	26.8	31.9	+0.1	48 37 29.5	.....	58.8	.....	.....	+1 3.7	54.9	.....	+ 7 22 21.3
	Venus Centre	21.3	27.8	-0.1	32 28 24.5	.....	60.9	29.50	60.0	+0 35.6	.....	.....	+23 31 54.4
	(a) α Leonis	55.2	62.8	0.0	43 14 59.0	- 0.1	61.0	29.51	60.0	+0 52.6	54.9	.....	+12 45 3.0
June 6	α Bootis	56.3	63.3	0.0	35 58 59.8	.....	56.8	29.48	56.3	+0 41.0	55.4	56.0	+20 1 15.2
	(b) ζ Ursæ Minoris.....	11.2	18.5	-0.3	337 44 14.6	+ 0.1	55.8	.....	.....	-0 23.3	56.7	.....	+78 17 4.6
June 7	(c) α Leonis	57.0	62.5	0.0	43 14 59.8	- 0.2	61.0	29.21	58.8	+0 52.1	55.2	55.2	.....
	Mercury Centre.....	37.2	41.5	0.0	38 26 39.3	.....	61.9	29.37	58.0	+0 44.1	.....	55.3	+17 33 31.9
June 8	(d) Sun South L.	43.5	49.4	-0.1	33 26 46.3	+ 1.0	62.6	29.39	59.9	+0 36.7	.....	.....	+22 33 31.3
	θ Ursæ Majoris.....	12.5	20.1	-0.5	3 36 15.8	.....	63.0	.....	.....	+0 3.5	54.4	.....	+52 24 36.0
	α Serpentis	48.5	54.8	+0.1	49 3 51.8	.....	55.0	29.38	56.8	+1 5.0	55.6	.....	+ 6 55 58.5
	ζ Ursæ Minoris.....	10.6	16.4	-0.3	337 44 13.2	.....	.....	.....	.....	-0 23.2	55.9	.....	+78 17 5.3
	Saturn Centre	6.5	12.0	+0.1	75 24 9.4	.....	54.7	29.39	56.6	+3 33.2	.....	.....	-19 26 47.3
June 10	α Virginis.....	9.8	13.2	+0.1	66 18 11.7	.....	56.0	29.56	56.3	+2 8.4	56.3	55.2	-10 19 24.9
	η Ursæ Majoris.....	38.9	43.0	-0.5	5 53 40.5	.....	.....	.....	.....	+0 5.8	54.5	.....	+50 7 8.9
	β Ursæ Minoris.....	24.0	29.7	-0.4	341 12 26.4	.....	56.9	29.58	56.8	-0 19.4	53.5	.....	+74 48 48.2
	δ Ophiuchi	1.0	4.7	+0.1	59 16 2.9	.....	57.0	29.57	56.8	+1 34.9	56.8	.....	- 3 16 42.6
	η Draconis.....	17.9	23.1	-0.6	354 8 20.0	.....	.....	.....	.....	-0 5.9	54.7	.....	+61 52 41.1
June 11	(e) Sun North L.....	17.2	22.9	-0.1	32 40 19.9	+ 0.5	.....	.....	.....	+0 36.5	.....	55.0	+23 19 58.1
	(f) Sun South L.....	45.0	50.8	-0.1	33 11 47.7	+ 1.4	57.8	29.78	57.3	+0 37.2	.....	.....	+22 48 28.7
	β Geminorum	42.9	48.6	-0.1	27 35 45.6	.....	58.0	29.82	57.7	+0 29.8	55.0	.....	.....
	Venus Centre	15.2	20.1	-0.1	33 50 17.5	.....	57.8	29.83	57.8	+0 38.2	.....	.....	+22 9 59.3
June 12	(g) α Ursæ Minoris S. P.	40.4	45.9	0.0	324 28 43.2	-10.0	47.1	29.83	53.4	-0 41.8	55.2	54.3	+88 26 57.1
	η Ursæ Majoris.....	38.7	41.8	-0.5	5 53 39.8	.....	.....	.....	.....	+0 6.0	54.3	.....	+50 7 8.5
	(h) η Bootis.....	48.8	52.0	0.0	36 47 50.5	- 0.1	.....	.....	.....	+0 43.6	53.7	.....	+19 12 20.3
	α Bootis	53.9	58.5	0.0	35 58 56.2	.....	46.6	29.83	50.5	+0 42.4	54.1	.....	+20 1 15.7
	Saturn Centre	29.1	33.2	+0.1	75 21 31.2	.....	45.5	29.83	49.5	+3 39.9	.....	.....	-19 24 16.8
	Mercury Centre	28.6	32.2	0.0	35 49 30.4	.....	50.0	29.81	51.8	+0 41.8	.....	55.2	+20 10 43.0
	α Tauri	8.8	13.5	0.0	39 49 11.2	.....	.....	.....	.....	+0 48.3	55.1	.....	+16 10 55.7
	α Aurigæ	1.0	6.5	-0.4	10 11 3.3	.....	.....	.....	.....	+0 10.4	55.1	.....	+45 49 41.5
June 13	(a) Sun North L.	16.2	21.4	-0.1	32 32 18.6	+ 0.3	50.1	29.81	51.7	+0 36.9	.....	.....	+23 27 59.4
	Venus Centre	3.5	10.0	0.0	34 22 6.7	.....	50.6	29.78	52.2	+0 39.5	.....	.....	+21 38 9.0
	Saturn Centre	53.5	57.5	+0.1	75 20 55.6	.....	.....	.....	.....	+3 39.3	.....	.....	-19 23 39.7
	η Draconis.....	17.4	23.4	-0.6	354 8 19.9	.....	45.8	29.78	50.0	-0 6.1	55.3	.....	+61 52 41.4
	Mercury Centre.....	31.7	36.3	0.0	35 19 34.0	.....	48.1	29.75	52.1	+0 41.1	.....	54.3	+20 40 39.2
June 14	(i) Sun South L.	26.5	31.9	-0.1	33 0 29.1	+ 0.8	.....	.....	.....	+0 37.6	.....	.....	+22 59 46.8
	(k) Sun North L.....	55.5	61.9	-0.1	32 28 58.6	+ 0.2	49.4	29.75	51.6	+0 36.8	.....	.....	+23 31 18.7
	α Canis Minoris.....	45.0	49.8	+0.1	50 21 47.4	.....	50.7	29.72	51.8	+1 9.5	56.5	.....	+ 5 37 57.4
	β Geminorum	41.5	46.9	-0.1	27 35 44.1	.....	.....	.....	.....	+0 30.1	53.6	.....	+28 24 40.1
	Venus Centre	48.0	53.7	0.0	34 38 50.9	.....	50.9	29.71	52.0	+0 39.8	.....	.....	+21 21 23.6
	α Bootis	54.6	56.8	0.0	35 58 55.7	.....	48.2	29.72	52.5	+0 42.1	53.5	.....	+20 1 16.5
	(a) ε Bootis.....	5.1	10.0	-0.1	28 15 7.4	+ 0.3	.....	.....	.....	+0 31.1	54.3	.....	+27 45 15.5
	β Ursæ Minoris.....	23.9	29.2	-0.4	341 12 26.1	.....	.....	.....	.....	-0 19.8	53.6	.....	+74 48 48.0
	Saturn Centre	21.1	25.7	+0.1	75 20 23.5	.....	48.7	29.72	51.9	+3 37.3	.....	.....	-19 23 6.5
	(l) α Tauri.....	9.7	14.0	0.0	39 49 11.9	- 0.1	.....	.....	.....	+0 47.5	55.0	56.0	+16 10 56.7
	Mercury Centre.....	32.5	36.4	0.0	34 50 34.4	.....	57.0	29.76	54.8	+0 39.6	.....	.....	+21 9 42.0

(a) 1^m after transit.
(b) 45^s after transit.
(c) 30^s after transit.
(d) At 5^h 5^m 8^s.

(e) At Wire I.
(f) At 5^h 18^m 5^s.
(g) At 13^h 16^m 6^s.
(h) At Wire IV.

(i) 50^s before transit.
(k) 50^s after transit.
(l) At Wire V.

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
June 15	(a) Sun North L.	58.8	64.9	-0.1	32 26 1.7	+ 0.6	.....	.....	.....	+0 36.3	.....	56.0	+23 34 17.4
	(b) Sun South L. *	31.4	36.3	-0.1	32 57 33.7	+ 0.2	55.2	29.77	55.4	+0 37.1	.....	.....	+23 2 45.0
	η Bootis.....	50.9	57.2	0.0	36 47 54.1	.....	51.0	29.83	55.0	+0 43.2	57.4	.....	+19 12 18.7
	α Bootis	54.2	60.9	0.0	35 58 57.6	.....	.....	.....	.....	+0 42.0	55.5	.....	+20 1 16.4
	Saturn Centre	46.5	50.1	+0.1	75 19 48.4	.....	50.5	29.87	53.8	+3 37.4	.....	.....	-19 22 29.8
June 16	α Canis Minoris	45.1	52.1	+0.1	50 21 48.6	.....	.....	.....	.....	+1 7.2	55.5	53.9	+ 5 37 58.1
	β Geminorum	43.7	51.3	-0.1	27 35 47.4	.....	71.0	29.97	65.7	+0 29.1	55.8	.....	+28 24 37.4
	ε Leonis.....	27.5	34.5	-0.1	31 29 30.9	.....	71.0	29.98	68.0	+0 34.1	52.2	.....	+24 30 48.9
	α Leonis.....	52.3	59.4	0.0	43 14 55.9	.....	.....	.....	.....	+0 52.4	52.1	.....	+12 45 5.6
	(c) Moon North L.	41.8	....	0.0	43 7 45.3	+17.8	.....	.....	.....	+0 52.2	.....	.....	+12 51 58.6
	(d)	51.5	....	0.0	43 7 55.0	+ 5.6	.....	.....	.....	+0 52.2	.....	.....	+12 52 1.1
	(e)	6.1	13.0	0.0	43 8 9.6	- 8.1	71.0	29.98	68.7	+0 52.2	.....	.....	+12 52 0.2
	Mercury Centre.....	3.5	8.5	-0.1	33 56 5.9	.....	60.5	29.94	60.0	+0 38.3	.....	54.8	+22 4 10.6
June 17	(f) Sun South L.	51.3	58.2	-0.1	32 52 54.7	+ 0.4	.....	.....	.....	+0 36.8	.....	.....	+23 7 22.9
	(g) Sun North L.	18.7	23.3	-0.1	32 21 20.8	+ 0.4	60.0	29.93	60.0	+0 36.0	.....	.....	+23 38 57.6
	α Leonis	55.5	61.2	0.0	43 14 58.4	.....	73.0	29.87	64.2	+0 52.0	54.2	.....	+12 45 4.4
	(h) Moon North L.	30.6	....	+0.1	48 56 33.8	+17.6	.....	.....	.....	+1 3.4	.....	.....	+ 7 3 0.0
	(i)	42.2	....	+0.1	48 56 45.4	+ 6.1	.....	.....	.....	+1 3.4	.....	.....	+ 7 2 59.9
	(k)	52.3	....	+0.1	48 56 55.5	- 4.0	.....	.....	.....	+1 3.4	.....	.....	+ 7 2 59.9
	(l)	0.5	6.8	+0.1	48 57 3.7	-12.0	72.5	29.86	66.0	+1 3.4	.....	.....	+ 7 2 59.7
	(m) α Bootis	55.6	61.4	0.0	35 58 58.5	- 0.1	66.0	29.83	64.0	+0 40.7	55.2	.....	+20 1 15.7
	α Coronæ borealis	50.8	57.7	-0.1	28 44 54.2	.....	63.5	29.84	63.4	+0 30.9	54.9	.....	+27 15 29.7
	Mercury Centre.....	56.8	63.5	-0.1	33 31 0.0	.....	58.9	29.66	60.2	+0 37.4	.....	53.9	+22 29 16.5
June 18	(n) Sun North L.	36.8	42.5	-0.1	32 19 39.6	+ 0.8	.....	.....	.....	+0 35.7	.....	.....	+23 40 37.8
	(o) Sun South L.	7.2	13.8	-0.1	32 51 10.4	0.0	59.9	29.67	60.5	+0 36.4	.....	.....	+23 9 7.1
	Venus Centre	40.5	47.3	0.0	35 50 43.9	.....	61.7	29.63	61.0	+0 40.5	.....	.....	+20 9 29.5
June 19	(a) Sun South L.	49.3	53.7	-0.1	32 49 51.4	+ 0.6	.....	.....	.....	+0 35.9	.....	53.0	+23 10 25.1
	(p) Sun North L.	21.5	25.1	-0.1	32 18 23.3	0.0	64.6	29.57	63.4	+0 35.2	.....	.....	+23 41 54.5
	Venus Centre	53.2	59.1	0.0	36 9 56.2	.....	68.7	29.59	66.8	+0 40.4	.....	.....	+19 50 16.4
	α Leonis.....	54.5	60.8	0.0	43 14 57.7	.....	68.1	29.62	67.0	+0 52.0	53.6	.....	+12 45 3.3
	α Ursæ Majoris	40.2	46.2	-0.6	353 23 42.6	.....	.....	.....	.....	-0 6.5	52.3	.....	+62 37 16.9
	δ Leonis	56.5	62.0	0.0	34 35 59.2	.....	67.8	29.63	66.0	+0 38.2	53.7	.....	+21 24 15.6
	Mars Centre	17.1	22.0	+0.1	54 13 19.7	.....	.....	.....	.....	+1 17.0	.....	.....	+ 1 46 16.3
	η Virginis.....	59.0	64.5	+0.1	55 46 1.8	.....	.....	.....	.....	+1 21.7	.....	.....	+ 0 13 29.5
	(q) Moon North L.	33.1	37.0	+0.1	60 47 35.2	+11.9	.....	.....	.....	+1 39.4	.....	.....	- 4 48 33.5
	(r)	50.0	54.0	+0.1	60 47 52.2	- 5.5	.....	.....	.....	+1 39.4	.....	.....	- 4 48 33.1
	(s) α Ursæ Minoris S. P.	23.0	28.5	0.0	324 29 25.8	-57.5	.....	.....	.....	-0 40.0	52.4	.....	+88 26 55.3
	Jupiter Centre.....	14.0	19.8	+0.1	58 20 17.0	.....	65.0	29.67	65.0	+1 30.2	.....	.....	- 2 20 54.2
June 25	Saturn Centre	32.2	36.9	+0.1	75 17 34.7	.....	59.0	29.72	61.5	+3 31.9	.....	.....	-19 20 13.6
	Sun South L.	39.8	45.2	-0.1	32 50 42.4	.....	55.5	29.52	56.3	+0 36.6	.....	53.2	+23 9 34.2
	June 27	(t) β Ursæ Minoris.....	15.0	21.0	-0.4	341 12 17.5	+ 5.7	49.0	29.46	51.9	-0 19.6	53.4	53.4
June 29	(u) α Ursæ Majoris.....	44.5	50.5	-0.6	353 23 46.9	0.0	52.0	29.84	53.4	-0 6.8	55.2	55.5	+62 37 15.4
	ε Bootis	4.0	11.0	-0.1	28 15 7.4	.....	.....	.....	.....	+0 31.3	56.6	.....	+27 45 16.8
	α ² Libræ.....	25.2	27.8	+0.1	71 20 26.6	.....	48.2	29.89	51.3	+2 50.7	53.9	.....	-15 22 21.8
	β Ursæ Minoris	22.0	27.8	-0.4	341 12 24.4	.....	.....	.....	.....	-0 19.9	54.6	.....	+74 48 51.0
	β Libræ.....	9.0	13.0	+0.1	64 46 11.1	.....	.....	.....	.....	+2 3.0	57.3	.....	- 8 47 18.6
	Saturn Centre	34.3	39.0	+0.1	75 12 36.8	.....	48.0	29.89	51.0	+3 37.0	.....	.....	-19 15 18.3
	Groomb. 944 S. P.	4.9	10.9	+0.1	321 7 7.9	.....	47.5	29.89	50.6	-0 47.2	.....	.....	+85 5 25.2
(a) At Wire I.		(f) 30 ^s before transit.		(l) At 10 ^h 57 ^m 24 ^s .		(q) At 12 ^h 23 ^m 50 ^s .							
(b) 50 ^s after transit.		(g) At 5 ^h 42 ^m 0 ^s .		(m) At Wire IV.		(r) At 12 ^h 25 ^m 2 ^s .							
(c) At 10 ^h 8 ^m 26 ^s .		(h) At 10 ^h 55 ^m 25 ^s .		(n) At 5 ^h 44 ^m 22 ^s .		(s) At 12 ^h 29 ^m 10 ^s .							
(d) At 10 ^h 9 ^m 15 ^s .		(i) At 10 ^h 56 ^m 10 ^s .		(o) At 5 ^h 45 ^m 54 ^s .		(t) At 14 ^h 55 ^m 6 ^s .							
(e) At 10 ^h 10 ^m 14 ^s .		(k) At 10 ^h 56 ^m 52 ^s .		(p) At Wire V.		(u) At 10 ^h 54 ^m 30 ^s .							

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
July 1	(a) Sun North L.	47.8	54.8	-0.1	32 34 51.2	+ 1.1	.....	.....	.....	+0 36.6	.....	56.8	+23 25 27.9
	(b) Sun South L.	21.4	26.6	-0.1	33 6 23.9	- 0.1	57.9	29.97	55.0	+0 37.3	.....	.....	+22 53 55.7
	Mercury Centre	16.0	21.0	-0.1	31 38 18.5	.....	.....	.....	.....	+0 35.3	.....	.....	+24 22 3.0
	(c) α Coronæ borealis	47.8	56.0	-0.1	28 44 51.8	+ 0.7	51.7	29.98	55.4	+0 31.8	56.6	.....	+27 15 32.5
	(d) ζ Ursæ Minoris	4.2	11.0	-0.3	337 44 7.3	+ 0.6	.....	.....	.....	-0 23.9	55.7	.....	+78 17 12.8
	δ Ophiuchi	57.3	62.1	+0.1	59 15 59.8	.....	.....	.....	.....	+1 37.4	58.0	.....	- 3 16 40.4
	Saturn Centre	47.5	52.5	+0.1	75 11 50.0	.....	51.0	29.98	54.9	+3 36.0	.....	.....	-19 14 29.2
	* R. A. 16 ^h 42 ^m 40 ^s	30.0	35.7	0.0	40 20 32.8	.....	.....	.....	.....	+0 49.3	.....	.....	+15 39 34.7
	(e) * R. A. 16 43 56	45.8	52.1	0.0	39 55 48.9	- 0.1	.....	.....	.....	+0 48.6	.....	.....	+16 4 19.4
	(f) Groomb. 944 S. P. ...	7.4	13.6	+0.1	321 7 10.5	- 2.4	.....	.....	.....	-0 47.0	.....	.....	+85 5 24.3
	* R. A. 17 ^h 11 ^m 30 ^s	52.0	59.8	-0.2	27 5 55.7	.....	50.9	29.98	54.6	+0 29.7	.....	.....	+28 54 31.4
July 2	* R. A. 16 ^h 42 ^m 40 ^s	31.4	36.2	0.0	40 20 33.8	.....	55.5	30.00	56.1	+0 48.9	.....	56.4	+15 39 33.7
	γ Draconis	16.2	22.9	-0.5	4 30 19.0	.....	.....	.....	.....	+0 4.5	56.4	.....	+51 30 32.9
	δ Ursæ Minoris	6.0	12.8	-0.1	329 26 9.3	.....	54.1	29.99	54.8	-0 34.3	56.6	.....	+86 35 21.4
	α Lyræ	25.9	30.1	-0.3	17 22 27.6	.....	.....	.....	.....	+0 18.0	56.3	.....	+38 38 10.8
July 3	(c) Sun South L.	48.5	54.2	-0.1	33 14 51.3	+ 0.8	.....	.....	.....	+0 36.9	.....	55.6	+22 45 26.6
	(g) Sun North L.	17.7	23.2	-0.1	32 43 20.4	0.0	65.2	29.95	60.7	+0 36.2	.....	.....	+23 16 59.0
	Mercury Centre	18.9	25.0	-0.1	32 1 21.8	.....	66.6	.....	.....	+0 35.1	.....	.....	+23 58 58.7
	β Ursæ Minoris	20.3	27.0	-0.4	341 12 23.2	.....	62.0	29.92	62.0	-0 19.4	54.4	.....	+74 48 51.8
	β Libræ	10.0	16.2	+0.1	64 46 13.2	.....	.....	.....	.....	+1 59.8	56.5	.....	- 8 47 17.4
	α Coronæ borealis	48.4	56.1	-0.1	28 44 52.2	.....	.....	.....	.....	+0 31.2	55.9	.....	+27 15 32.2
	Saturn Centre	2.4	8.6	+0.1	75 11 5.6	.....	59.0	29.92	60.0	+3 31.8	.....	.....	-19 13 41.8
	* R. A. 16 ^h 42 ^m 40 ^s	29.5	35.6	0.0	40 20 32.5	.....	.....	.....	.....	+0 48.5	.....	.....	+15 39 34.6
	* R. A. 16 43 56	47.8	53.4	0.0	39 55 50.6	.....	.....	.....	.....	+0 47.8	.....	.....	+16 4 17.2
	(h) Groomb. 944 S. P. ...	3.1	10.0	+0.1	321 7 6.6	- 1.7	.....	.....	.....	-0 46.4	.....	.....	+85 5 22.9
	* R. A. 17 ^h 11 ^m 30 ^s	51.9	59.5	-0.2	27 5 55.5	.....	.....	.....	.....	+0 29.3	.....	.....	+28 54 30.8
	(c) * R. A. 17 15 30	5.9	11.3	-0.2	23 59 8.4	+ 0.8	.....	.....	.....	+0 25.5	.....	.....	+32 1 20.9
	* R. A. 17 16 3	51.1	56.8	-0.2	23 51 53.7	.....	.....	.....	.....	+0 25.3	.....	.....	+32 8 36.6
	* R. A. 17 21 0	30.5	35.5	-0.3	21 10 32.7	.....	.....	.....	.....	+0 22.2	.....	.....	+34 50 0.7
	* R. A. 17 23 43	29.1	34.0	-0.3	20 56 31.2	.....	.....	.....	.....	+0 21.9	.....	.....	+35 4 2.5
	* R. A. 17 26 7	3.7	9.8	-0.3	21 4 6.5	.....	.....	.....	.....	+0 22.1	.....	.....	+34 56 27.0
	* R. A. 17 28 1	15.9	21.3	-0.3	21 21 18.3	.....	.....	.....	.....	+0 22.4	.....	.....	+34 39 14.9
	(i) * R. A. 17 29 0	58.4	64.2	-0.3	21 9 1.0	+ 0.2	.....	.....	.....	+0 22.2	.....	.....	+34 51 32.2
	* R. A. 17 45 21	52.4	58.0	-0.4	14 45 54.8	.....	55.2	29.92	56.4	+0 15.1	.....	.....	+41 14 45.7
	* R. A. 17 50 4	33.3	39.1	-0.4	14 30 35.8	.....	.....	.....	.....	+0 14.8	.....	.....	+41 30 5.0
July 4	(c) Sun North L.	8.8	14.5	-0.1	32 48 11.6	+ 0.8	.....	.....	.....	+0 36.4	.....	55.2	+23 12 6.4
	(k) Sun South L.	38.9	44.5	-0.1	33 19 41.6	0.0	63.1	29.88	61.8	+0 37.1	.....	.....	+22 40 36.5
	Mercury Centre	30.1	35.3	-0.1	32 16 32.6	.....	64.1	.....	.....	+0 35.6	.....	.....	+23 43 47.0
	(c) Venus Centre	54.5	60.9	0.0	41 45 57.7	- 0.5	.....	.....	.....	+0 50.0	.....	.....	+14 14 8.0
	α Leonis	54.9	60.4	0.0	43 14 57.7	.....	66.8	29.88	64.3	+0 52.6	54.5	.....	+12 45 4.9
	α Ursæ Majoris	42.8	50.8	-0.6	353 23 46.2	.....	.....	.....	.....	-0 6.6	54.0	.....	+62 37 15.6
	* R. A. 16 ^h 43 ^m 56 ^s	48.5	54.8	0.0	39 55 51.6	.....	57.1	29.89	58.8	+0 47.8	.....	.....	+16 4 15.8
	δ Ursæ Minoris	56.8	63.3	-0.2	333 43 59.9	.....	.....	.....	.....	-0 28.4	57.0	.....	+82 17 23.7
	(l) Groomb. 944 S. P. ...	3.2	10.0	+0.1	321 7 6.6	- 2.0	.....	.....	.....	-0 46.4	.....	.....	+85 5 23.0
	* R. A. 17 ^h 11 ^m 30 ^s	52.3	59.2	-0.2	27 5 55.5	.....	.....	.....	.....	+0 29.3	.....	.....	+28 54 30.4
	(m) * R. A. 17 15 30	7.5	12.2	-0.2	23 59 9.7	+ 0.3	.....	.....	.....	+0 25.5	.....	.....	+32 1 19.7
	(e) * R. A. 17 16 3	51.9	57.4	-0.2	23 51 54.4	- 0.1	.....	.....	.....	+0 25.3	.....	.....	+32 8 35.6
	* R. A. 17 21 0	31.2	36.5	-0.3	21 10 33.5	.....	.....	.....	.....	+0 22.2	.....	.....	+34 49 59.5
	* R. A. 17 23 43	29.5	34.9	-0.3	20 56 31.9	.....	.....	.....	.....	+0 21.9	.....	.....	+35 4 1.4
	* R. A. 17 26 7	4.4	10.5	-0.3	21 4 7.2	.....	.....	.....	.....	+0 22.1	.....	.....	+34 56 25.9
	(n) * R. A. 17 28 1	15.9	21.5	-0.3	21 21 18.4	0.0	.....	.....	.....	+0 22.4	.....	.....	+34 39 14.4
	(i) * R. A. 17 29 0	59.5	64.9	-0.3	21 9 1.9	+ 0.2	.....	.....	.....	+0 22.2	.....	.....	+34 51 30.9
	* R. A. 17 45 21	54.1	59.9	-0.4	14 45 56.6	.....	55.0	29.88	56.0	+0 15.1	.....	.....	+41 14 43.5
	* R. A. 17 50 4	33.7	39.9	-0.4	14 30 36.4	.....	.....	.....	.....	+0 14.8	.....	.....	+41 30 4.0
	(a) At 6 ^h 38 ^m 30 ^s .		(c) At Wire IV.		(h) At 17 ^h 8 ^m 40 ^s .		(l) At 17 ^h 8 ^m 30 ^s .						
(b) At 6 ^h 40 ^m 10 ^s .		(f) At 17 ^h 8 ^m 0 ^s .		(i) At Wire V.		(m) At Wire II.							
(c) At Wire I.		(g) At 6 ^h 48 ^m 45 ^s .		(k) At 6 ^h 53 ^m 0 ^s .		(n) 10 ^s after transit.							
(d) At 15 ^h 52 ^m 0 ^s .													

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.										observed.	adopted.	
July 5	(a) Sun South L.	53.0	59.0	-0.1	33	24	55.9	+ 0.8	.....	.....	.....	+0 37.0	.....	55.2	+22 35 21.5
	(b) Sun North L.	21.9	27.9	-0.1	32	53	24.8	- 0.1	64.0	29.77	62.8	+0 36.3	.....	.....	+23 6 54.2
	Mercurey Centre	55.8	61.4	-0.1	32	33	58.5	.....	65.0	.....	.....	+0 35.8	.....	.....	+23 26 20.9
July 8	(c) Sun North L. *	30.5	35.3	-0.1	33	11	32.9	+ 0.6	.....	.....	.....	+0 35.9	.....	55.1	+22 48 45.7
	(d) Sun South L.	58.9	65.2	-0.1	33	43	2.0	- 0.1	64.5	29.11	61.8	+0 36.6	.....	.....	+22 17 16.6
	Mercurey Centre	28.0	32.9	-0.1	33	38	30.4	.....	65.8	.....	.....	+0 36.4	.....	.....	+22 21 48.3
	α Leonis	56.9	63.2	0.0	43	15	0.1	.....	64.7	29.12	62.3	+0 51.6	56.0	.....	+12 45 3.4
	(e) Venus South L.	54.7	62.0	0.0	43	27	58.4	+ 1.1	.....	.....	.....	+0 52.0	.....	.....	+12 32 3.6
	(f) Venus North L.	34.9	40.9	0.0	43	27	38.0	- 0.9	.....	.....	.....	+0 52.0	.....	.....	+12 32 26.0
	α Ursæ Majoris	43.5	50.9	-0.6	353	23	46.6	.....	.....	.....	.....	- 0 6.4	54.0	.....	+62 37 14.9
	δ Leonis	58.1	64.2	0.0	34	36	1.1	.....	64.0	29.13	62.8	+0 37.9	55.4	.....	+21 24 16.1
	θ Draconis	6.2	12.9	-0.6	357	1	8.9	.....	56.2	29.16	59.8	- 0 3.0	.....	.....	+58 59 49.2
	Saturn Centre	24.1	29.2	+0.1	75	9	26.8	.....	.....	.....	.....	+3 27.3	.....	.....	-19 11 59.0
	Groomb. 944 S. P. ...	59.2	65.8	+0.1	321	7	2.5	.....	.....	.....	.....	- 0 45.4	.....	.....	+85 5 22.0
	(a) * R. A. 17 ^h 15 ^m 30 ^s	5.7	10.2	-0.2	23	59	7.8	+ 0.8	.....	.....	.....	+0 25.0	.....	.....	+32 1 21.5
	* R. A. 17 16 3	52.2	57.3	-0.2	23	51	54.5	.....	.....	.....	.....	+0 21.8	.....	.....	+32 8 35.8
	* R. A. 17 21 0	29.8	34.2	-0.3	21	10	31.7	.....	.....	.....	.....	+0 21.7	.....	.....	+34 50 1.7
	* R. A. 17 23 43	28.9	33.0	-0.3	20	56	30.6	.....	.....	.....	.....	+0 21.5	.....	.....	+35 4 3.0
	* R. A. 17 26 7	3.6	9.0	-0.3	21	4	6.0	.....	.....	.....	.....	+0 21.6	.....	.....	+34 56 27.5
	* R. A. 17 28 1	14.6	19.8	-0.3	21	21	16.9	.....	.....	.....	.....	+0 21.9	.....	.....	+34 39 16.3
	(y) * R. A. 17 29 0	58.2	63.8	-0.3	21	9	0.7	- 0.1	.....	.....	.....	+0 21.7	.....	.....	+34 51 32.8
	* R. A. 17 45 21	54.0	59.9	-0.4	14	45	56.5	.....	53.8	29.18	57.8	+0 14.8	.....	.....	+41 14 43.8
	* R. A. 17 50 4	32.5	38.0	-0.4	14	30	34.8	.....	.....	.....	.....	+0 14.5	.....	.....	+41 30 5.8
July 9	(h) Sun North L.	20.0	24.0	-0.1	33	18	21.9	+ 0.1	61.5	29.17	58.9	+0 36.3	.....	54.4	+22 41 56.1
	γ Draconis	12.9	18.2	-0.5	4	30	15.0	.....	52.0	29.25	55.5	+0 4.4	54.5	.....	+51 30 35.0
	(i) 51 (Hev.) Cephei S.P.*	27.3	32.8	+0.1	323	17	30.2	- 2.0	.....	.....	.....	- 0 42.4	54.7	.....	+87 15 51.4
	(k) δ Ursæ Minoris	0.5	6.3	-0.1	329	26	3.3	+ 0.4	.....	.....	.....	- 0 33.6	53.9	.....	+86 35 24.3
	(l) 24 Ursæ Minoris	32.4	38.3	-0.1	329	3	35.3	+ 1.2	.....	.....	.....	- 0 34.1	.....	.....	+86 57 52.0
July 10	Groomb. 1119 S. P. ...	40.5	44.9	0.0	325	4	42.7	.....	52.1	29.26	55.3	- 0 39.7	.....	.....	+89 3 8.6
	(m) Venus North L.	58.7	64.8	0.0	44	20	1.7	- 1.4	64.0	29.20	59.5	+0 53.8	.....	54.8	+11 40 0.7
	α Ursæ Majoris	45.1	51.3	-0.6	353	23	47.6	.....	.....	.....	.....	- 0 6.5	54.6	.....	+62 37 13.7
	(n) β Leonis	49.9	55.8	0.0	40	31	52.8	- 0.1	.....	.....	.....	+0 47.3	54.8	.....	+15 28 14.8
July 12	γ Ursæ Majoris	22.0	28.2	-0.5	1	25	24.6	.....	63.0	29.26	60.5	+0 1.3	55.1	.....	+54 35 28.9
	η Draconis	10.2	16.1	-0.6	354	8	12.6	.....	53.6	29.47	56.5	- 0 5.9	55.8	55.7	+61 52 49.0
	α Herculis	24.2	28.9	0.0	41	25	26.5	.....	.....	.....	.....	+0 50.1	55.5	.....	+14 34 39.1
	γ Draconis	12.9	19.2	-0.5	4	30	15.5	.....	52.9	29.50	54.0	+0 4.4	55.9	.....	+51 30 35.8
July 13	(o) Sun South L.	57.7	62.2	0.0	34	20	59.9	+ 0.1	61.9	29.68	60.6	+0 38.4	.....	55.2	+21 39 16.8
	(p) Mercury Centre	14.8	21.0	0.0	35	58	18.0	- 1.3	62.9	29.70	61.9	+0 40.7	.....	.....	+20 1 57.8
	(q) α Leonis	55.8	61.0	0.0	43	14	58.4	- 0.2	63.9	29.70	62.6	+0 52.7	55.2	.....	.....
	(r) Venus South L.	24.0	28.5	+0.1	45	40	26.3	- 1.2	63.8	29.71	62.9	+0 57.3	.....	.....	+10 19 32.8
July 15	(s) α Leonis	55.7	61.7	0.0	43	14	58.7	- 0.2	60.1	29.52	59.3	+0 52.8	55.6	55.3	+12 45 4.0
	(t) Venus North L.	16.1	21.1	+0.1	46	34	18.7	- 1.3	.....	.....	.....	+0 59.3	.....	.....	+ 9 25 38.6
	α Ursæ Majoris	46.5	53.0	-0.6	353	23	49.2	.....	.....	.....	.....	- 0 6.6	55.2	.....	+62 37 12.7
	(u) Moon North L.	3.9	9.0	+0.1	52	35	6.5	- 3.6	59.0	29.51	59.2	+1 13.4	.....	.....	+ 3 24 39.0
	α Serpentis	43.9	50.0	+0.1	49	3	47.1	.....	54.1	29.59	57.6	+1 5.6	55.7	.....	+ 6 56 2.6
	(x) δ Ursæ Minoris	0.0	6.2	-0.1	329	26	3.0	+ 0.1	.....	.....	.....	- 0 34.0	54.7	.....	+86 35 26.2
	(y) 24 Ursæ Minoris	32.0	37.9	-0.1	329	3	34.9	+ 0.5	.....	.....	.....	- 0 34.6	.....	.....	+86 57 54.5
	Groomb. 1119 S. P. ...	41.0	44.6	0.0	325	4	42.8	.....	51.0	29.61	52.6	- 0 40.2	.....	.....	+89 3 7.3

(a) At Wire I.

(b) At 6^h 57^m 5^s.(c) At 7^h 7^m 20^s.(d) At 7^h 8^m 55^s.

(e) At Wire I. Cor-

rection for defect

of illumination 0^u.5.

(f) At Wire V.

(g) At Wire IV.

(h) At 7^h 11^m 54^s.(i) At 18^h 18^m 35^s.(k) At 18^h 23^m 0^s.(l) At 18^h 34^m 20^s.(m) At 10^h 20^m 30^s.(n) At 11^h 42^m 15^s.(o) At 7^h 28^m 40^s.(p) At 8^h 43^m 15^s.(q) At 10^h 1^m 25^s.(r) At 10^h 32^m 5^s.Correction for
defect of illumination 0^u.6.(s) At 10^h 1^m 35^s.(t) At 10^h 39^m 57^s.(u) At 11^h 22^m 53^s; faint.(v) At 18^h 26^m 10^s.(y) At 18^h 33^m 50^s.

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.		Equatorial Point		Apparent Declination observed.		
		I.	II.											observed.	adopted.			
July 16	γ Draconis	12.0	19.0	-0.5	4	30	15.0	.....	55.1	29.79	58.0	+0	4.5	56.6	56.0	+51	30	36.5
	(a) 51 (Hev.) Cephei S.P.	25.8	31.0	+0.1	323	17	28.4	-0.8	.....	.....	.....	-0	42.9	55.5	.....	+87	15	48.7
	(b) δ Ursæ Minoris	0.5	7.7	-0.1	329	26	4.0	+0.1	.....	.....	.....	-0	34.0	56.0	.....	+86	35	25.9
	(c) 24 Ursæ Minoris	31.7	37.9	-0.1	329	3	34.7	+0.6	54.5	29.80	57.5	-0	34.5	.....	.....	+86	57	55.2
July 17	(d) 51 (Hev.) Cephei S.P.	23.9	29.5	+0.1	323	17	26.7	-0.1	.....	.....	.....	-0	42.4	55.4	55.8	+87	15	48.4
	(e) δ Ursæ Minoris	59.9	66.9	-0.1	329	26	3.3	+0.1	.....	.....	.....	-0	33.6	56.0	.....	+86	35	26.0
	α Lyræ	21.2	26.0	-0.3	17	22	23.2	.....	56.0	29.57	58.1	+0	17.7	56.0	.....	+38	38	14.9
	(f) 24 Ursæ Minoris	27.0	33.4	-0.1	329	3	30.1	+4.3	.....	.....	.....	-0	34.1	.....	.....	+86	57	55.5
July 18	(g) α Ophiuchi	9.0	13.1	0.0	43	19	11.1	-0.2	57.6	29.04	58.0	+0	52.3	56.1	55.6	+12	40	52.4
	γ Draconis	11.5	17.2	-0.5	4	30	13.8	.....	.....	.....	.....	+0	4.3	55.7	.....	+51	30	37.5
	δ Ursæ Minoris	58.0	65.4	-0.1	329	26	1.6	.....	.....	.....	.....	-0	33.1	55.0	.....	+86	35	27.1
	24 Ursæ Minoris	30.9	36.8	-0.1	329	3	33.8	.....	56.0	29.07	57.8	-0	33.6	.....	.....	+86	57	55.4
July 20	γ Ursæ Majoris	23.9	28.4	-0.5	1	25	25.6	.....	63.1	29.16	59.5	+0	1.3	54.9	56.1	+54	35	29.2
	β Draconis	25.4	31.4	-0.5	3	35	27.9	.....	56.0	29.22	58.3	+0	3.5	56.0	.....	+52	25	24.7
	ζ Aquilæ	18.3	23.5	0.0	42	22	20.8	.....	56.1	29.23	57.9	+0	51.1	57.4	.....	+13	37	44.2
July 21	(h) Moon North L.	44.0	47.2	+0.1	82	21	45.6	-7.1	58.2	29.40	59.0	+6	33.6	.....	55.0	-26	27	17.1
	α Scorpii	55.5	61.0	+0.1	81	58	58.4	.....	.....	.....	.....	+6	16.6	.....	.....	-26	4	20.0
	(i) η Draconis	6.9	13.0	-0.6	354	8	9.4	+0.5	.....	.....	.....	-0	5.8	55.0	.....	.....	.....	.....
July 24	(k) Saturn Centre	37.7	43.5	+0.1	75	6	40.6	.....	59.2	29.31	60.3	+3	26.3	.....	55.4	-19	9	11.5
	η Draconis	7.1	13.2	-0.6	354	8	9.7	.....	.....	.....	.....	-0	5.8	55.2	.....	+61	52	51.5
	ε Ursæ Minoris	50.8	56.1	-0.2	333	43	53.3	.....	.....	.....	.....	-0	27.7	55.8	.....	+82	17	29.8
	α Herculis	22.0	27.5	0.0	41	25	24.7	.....	58.2	29.31	59.0	+0	49.3	54.7	.....	+14	34	41.4
	δ Ursæ Minoris	57.9	63.9	-0.1	329	26	0.7	.....	57.5	29.31	58.0	-0	33.2	55.8	.....	+86	35	27.9
July 25	(l) Sun North L.	55.0	59.4	0.0	35	57	57.3	-0.4	56.0	29.42	57.8	+0	40.9	.....	56.4	+20	2	18.6
	(m) ε Ursæ Minoris	49.0	54.8	-0.2	333	43	51.8	+2.0	54.0	29.45	58.4	-0	28.1	56.1	.....	+82	17	30.7
	α Lyræ	18.8	23.9	-0.3	17	22	20.9	.....	53.8	29.45	57.3	+0	17.7	55.9	.....	+38	38	17.8
	(n) β Lyræ	40.0	46.5	-0.2	22	49	43.1	+0.3	.....	.....	.....	+0	23.9	57.1	.....	+33	10	49.1
July 26	(o) Sun South L.	23.8	29.1	0.0	36	42	26.3	+1.1	.....	.....	.....	+0	42.0	.....	55.8	+19	17	46.4
	(p) Sun North L.	50.6	56.2	0.0	36	10	53.4	-0.5	56.8	29.40	58.5	+0	41.2	.....	.....	+19	49	21.7
	(q) Mercury Centre	32.0	37.1	0.0	43	35	34.5	-1.2	56.7	29.38	57.8	+0	53.5	.....	.....	+12	24	29.0
July 27	γ Ursæ Majoris	25.0	31.0	-0.5	1	25	27.5	.....	54.8	29.36	56.5	+0	1.3	55.7	55.3	+54	35	26.5
	(r) η Draconis	6.4	13.8	-0.6	354	8	9.6	0.0	53.8	29.41	56.5	-0	5.9	55.4	.....	+61	52	51.6
	δ Ursæ Minoris	56.0	63.8	-0.1	329	25	59.7	.....	53.0	29.42	56.1	-0	33.7	55.1	.....	+86	35	29.3
	α Lyræ	17.5	22.5	-0.3	17	22	19.6	.....	.....	.....	.....	+0	17.7	55.1	.....	+38	38	18.0
July 29	Sun North L.	36.2	39.4	0.0	36	51	37.7	.....	59.0	29.59	58.9	+0	42.3	.....	55.9	+19	8	35.9
	Venus North L.	47.1	52.1	+0.1	53	4	49.7	.....	61.1	29.55	59.9	+1	14.5	.....	.....	+2	54	51.7
	ε Ursæ Minoris	50.1	56.7	-0.2	333	43	53.3	.....	54.2	29.53	58.2	-0	28.2	56.2	.....	+82	17	30.8
	α Herculis	20.9	27.0	0.0	41	25	23.9	.....	.....	.....	.....	+0	50.1	55.4	.....	+14	34	41.9
	β Draconis	23.8	29.2	-0.5	3	35	26.0	.....	.....	.....	.....	+0	3.5	56.1	.....	+52	25	26.4
July 30	(s) Sun South L.	20.8	26.0	0.0	37	37	23.3	+0.9	.....	.....	.....	+0	43.7	.....	56.4	+18	22	48.5
	(t) Sun North L.	51.5	56.5	0.0	37	5	54.0	-0.5	55.0	29.51	57.0	+0	42.9	.....	.....	+18	54	20.0
	Mercury Centre	10.8	17.1	+0.1	46	1	14.0	.....	56.9	29.50	57.4	+0	58.5	.....	.....	+9	58	43.9
	α Ursæ Majoris	51.0	57.2	-0.6	353	23	53.6	.....	.....	.....	.....	-0	6.6	56.3	.....	+62	37	9.4
	(u) Venus South L.	19.4	24.7	+0.1	53	33	22.2	+1.0	.....	.....	.....	+1	16.2	.....	.....	+2	26	17.0
	(g) Venus North L.	55.9	62.0	+0.1	53	32	59.2	-1.0	57.0	29.48	57.4	+1	16.2	.....	.....	+2	26	42.0
	(k) β Leonis	51.6	56.2	0.0	40	31	53.8	.....	.....	.....	.....	+0	48.2	56.8	.....	+15	28	14.4
	(v) At Wire I. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

(a) At 18^h 20^m 6^s.

(b) At 18^h 23^m 40^s.

(c) At 18^h 33^m 0^s.

(d) At 18^h 21^m 50^s.

(e) At 18^h 25^m 30^s.

(f) At 18^h 37^m 15^s.

(g) At 17^h 28^m 40^s.

(h) At 16^h 3^m 58^s; cloudy.

(i) At 16^h 23^m 24^s.

(k) Faint.

(l) At 8^h 18^m 8^s.

(m) At 17^h 6^m 35^s.

(n) At Wire II.

(o) At 8^h 20^m 23^s.

(p) At 8^h 21^m 56^s.

(q) At Wire V.

(r) 20^s after transit.

(s) At Wire I.

(t) At 8^h 36^m 58^s.

(u) At Wire I.: Correction for defect of illumination 1".0.

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
July 30	(a) α Ursæ Minoris S. P.	46.5	53.0	0.0	324 28 49.8	- 13.6	.....	.....	.....	- 0 40.5	55.9	56.4	+ 88 26 59.3
	(b) 12 Canum Venat.	16.0	20.0	- 0.3	16 49 17.7	0.0	56.3	29.47	57.6	+ 0 17.1	56.4	.....	+ 39 11 21.6
Aug. 1	(c) Sun North L.	8.5	14.4	0.0	37 35 11.4	+ 0.8	.....	.....	.....	+ 0 43.8	.....	56.3	+ 18 25 0.3
	(d) Sun South L.	40.6	45.8	0.0	38 6 43.1	- 0.6	54.6	29.58	56.0	+ 0 44.6	.....	.....	+ 17 53 29.2
	(e) Venus North L.	1.5	7.6	+ 0.1	54 29 4.7	- 1.3	.....	.....	.....	+ 1 18.5	.....	.....	+ 1 30 34.4
	γ Ursæ Majoris.	27.1	32.4	- 0.5	1 25 29.2	.....	60.7	29.57	57.5	+ 0 1.3	56.5	.....	+ 54 35 25.8
	(f) α Lyrae.	16.0	21.2	- 0.3	17 22 18.2	+ 0.3	59.5	29.53	58.0	+ 0 17.6	55.2	.....	+ 38 38 20.2
	(g) ζ Aquilæ.	16.0	21.2	0.0	42 22 18.5	0.0	.....	.....	.....	+ 0 51.3	57.3	.....	+ 13 37 46.5
Sept. 12	Mercury Centre.	5.8	9.5	+ 0.1	46 30 7.7	.....	52.5	29.11	53.3	+ 0 59.2	.....	55.6	+ 9 29 48.7
	α Ursæ Majoris.	3.5	9.8	- 0.6	353 24 6.1	.....	.....	.....	.....	- 0 6.6	55.4	.....	+ 62 36 56.1
Sept. 13	(h) Sun South L.	36.9	40.4	+ 0.1	52 17 38.9	+ 0.8	.....	.....	.....	+ 1 12.6	.....	.....	+ 3 42 3.3
	(i) Sun North L.	50.5	55.0	+ 0.1	51 45 52.8	- 1.6	53.1	29.12	53.8	+ 1 11.2	.....	.....	+ 4 13 53.2
	γ Ursæ Majoris.	37.6	42.5	- 0.5	1 25 39.5	.....	.....	.....	.....	+ 0 1.3	55.9	.....	+ 54 35 14.8
	(k) 12 Canum Venat.	21.9	26.1	- 0.3	16 49 23.7	+ 0.8	.....	.....	.....	+ 0 16.9	55.9	.....	+ 39 11 14.2
	(l) α Ursæ Minoris S. P.	45.1	51.3	0.0	324 28 48.3	- 0.3	.....	.....	.....	- 0 40.2	55.1	.....	+ 88 27 12.2
	Venus North L.	50.9	54.2	+ 0.1	70 15 52.6	.....	54.5	29.12	54.7	+ 2 34.7	.....	.....	- 14 17 31.7
Sept. 16	Uranus.	52.0	54.6	+ 0.1	62 57 53.5	.....	46.9	29.07	50.9	+ 1 50.9	.....	.....	- 6 58 48.8
Sept. 17	(m) α Pegasi.	15.3	21.4	0.0	41 39 18.4	+ 0.1	52.7	28.94	53.0	+ 0 49.7	55.2	55.2	.....
	α Bootis.	58.2	63.5	0.0	35 59 0.9	.....	55.8	28.93	54.8	+ 0 40.3	57.9	56.6	+ 20 1 15.4
Sept. 17	β Ursæ Minoris.	25.0	31.4	- 0.4	341 12 27.7	.....	55.0	.....	.....	- 0 19.0	54.3	.....	+ 74 48 47.9
	δ Aquilæ.	37.8	41.4	+ 0.1	53 11 39.6	.....	51.8	28.97	53.5	+ 1 14.8	57.5	.....	+ 2 48 2.2
	Uranus.	30.3	32.1	+ 0.1	63 1 31.2	.....	49.0	28.95	51.9	+ 1 50.2	.....	.....	- 7 2 24.8
Sept. 18	γ Aquilæ.	14.1	20.0	+ 0.1	45 46 17.1	.....	.....	.....	.....	+ 0 57.9	57.3	56.2	+ 10 13 41.2
	α Aquilæ.	49.6	54.5	+ 0.1	47 32 52.3	.....	49.9	29.02	53.2	+ 1 1.6	56.1	.....	+ 8 27 2.3
	α^2 Capricorni.	41.3	45.5	+ 0.1	69 0 43.5	.....	.....	.....	.....	+ 2 25.5	55.7	.....	- 13 2 12.8
	λ Ursæ Minoris.	40.3	45.7	0.0	327 11 42.9	.....	51.0	29.01	52.9	- 0 36.4	55.5	.....	+ 88 49 49.7
	Uranus.	23.3	25.9	+ 0.1	63 2 24.6	.....	49.8	29.01	52.2	+ 1 50.4	.....	.....	- 7 3 18.8
Sept. 19	(n) Sun North L.	40.1	45.1	+ 0.1	54 4 42.7	- 1.1	55.1	29.05	54.0	+ 1 16.9	.....	56.3	+ 1 54 57.8
	(f) α^2 Capricorni.	41.8	46.5	+ 0.1	69 0 44.2	- 0.5	50.3	29.11	52.7	+ 2 26.1	56.5	.....	- 13 2 13.5
	π Capricorni.	30.2	34.9	+ 0.1	74 41 32.6	.....	.....	.....	.....	+ 3 23.1	.....	.....	- 18 43 59.1
	(o) λ Ursæ Minoris.	39.5	44.9	0.0	327 11 42.1	+ 0.3	.....	.....	.....	- 0 36.6	55.0	.....	+ 88 49 50.5
	(b) α Cygni.	56.7	61.0	- 0.4	11 17 58.6	0.0	.....	.....	.....	+ 0 11.3	57.1	.....	+ 44 42 46.1
	(p) Moon South L.	20.2	25.0	+ 0.1	77 29 22.7	+ 11.9	.....	.....	.....	+ 4 8.8	.....	.....	- 21 32 47.1
Sept. 20	ζ Cygni.	56.8	62.2	- 0.2	26 25 59.2	.....	49.8	29.11	52.3	+ 0 28.1	56.5	.....	+ 29 34 29.0
	(q) λ Ursæ Minoris.	35.4	40.5	0.0	327 11 37.9	+ 6.0	.....	.....	.....	- 0 36.8	56.6	56.6	+ 88 49 49.5
	(r) α Cygni.	54.9	59.8	- 0.4	11 17 57.1	+ 1.9	50.0	29.24	52.4	+ 0 11.3	57.7	.....	+ 44 42 46.3
	ζ Cygni.	56.2	60.9	- 0.2	26 25 58.3	.....	.....	.....	.....	+ 0 28.2	55.8	.....	+ 29 34 30.1
	α Cephei.	22.0	26.8	- 0.6	354 6 23.7	.....	50.0	29.25	52.4	- 0 5.9	56.4	.....	+ 61 54 38.8
	Moon South L.	21.8	26.0	+ 0.1	71 59 24.0	.....	.....	.....	.....	+ 2 52.5	.....	.....	- 16 1 19.9
	(f) δ Aquarii.	35.9	38.9	+ 0.1	64 33 37.5	- 0.4	50.7	29.25	52.4	+ 1 58.6	.....	.....	- 8 34 39.1
	σ Aquarii.	20.8	25.1	+ 0.1	67 28 23.1	.....	.....	.....	.....	+ 2 15.8	.....	.....	- 11 29 42.3
	Mercury Centre.	4.0	9.1	+ 0.1	47 9 6.7	.....	.....	.....	.....	+ 1 1.0	.....	57.1	+ 8 50 49.7
	α Ursæ Majoris.	7.5	14.0	- 0.6	353 24 10.2	.....	51.4	29.25	52.9	- 0 6.6	56.8	.....	+ 62 36 53.8
Sept. 21	(s) Sun North L.	14.7	18.3	+ 0.1	54 51 16.5	+ 0.3	52.0	29.25	53.0	+ 1 20.2	.....	.....	+ 1 8 20.4
	(f) Venus North L.	8.1	12.0	+ 0.1	70 50 10.1	- 0.5	52.8	29.24	53.2	+ 2 40.9	.....	.....	- 14 51 53.1
	η Ursæ Majoris.	46.5	52.0	- 0.5	5 53 48.8	.....	.....	.....	.....	+ 0 5.8	56.7	.....	+ 50 7 2.8
	α Bootis.	59.2	64.7	0.0	35 59 2.0	.....	54.0	29.23	53.7	+ 0 40.9	59.1	.....	+ 20 1 14.5
	λ Ursæ Minoris.	41.5	47.2	0.0	327 11 44.3	.....	49.8	29.23	52.9	- 0 36.8	57.2	.....	+ 88 49 49.9

(a) At 12^h 46^m 20^s.

(b) At Wire IV.

(c) At 8^h 43^m 30^s.(d) At 8^h 45^m 0^s.(e) 45^s after transit.

(f) At Wire V.

(g) At 18^h 59^m 35^s.(h) At 11^h 22^m 50^s.(i) At 11^h 24^m 35^s.(k) At 12^h 49^m 50^s.(l) At 13^h 0^m 25^s.(m) At 22^h 58^m 28^s.(n) At 11^h 45^m 55^s.(o) At 20^h 25^m 30^s.(p) At 20^h 59^m 32^s; cloudy.(q) At 20^h 35^m 0^s.(r) At 20^h 38^m 6^s.(s) At 11^h 52^m 16^s.

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
Sept. 21	θ Aquarii.....	34.8	37.8	+0.1	64 33 36.5	.....	49.0	29.21	50.7	+1 58.9	.....	57.4	- 8 34 38.0
	σ Aquarii.....	18.5	23.5	+0.1	67 28 21.2	.....	.....	.....	.....	+2 16.2	.....	.....	- 11 29 40.0
	Moon South L.	35.1	39.5	+0.1	65 28 37.5	.....	.....	.....	.....	+2 4.0	.....	.....	- 9 29 44.1
	Uranus.....	0.9	3.8	+0.1	63 5 2.4	.....	.....	.....	.....	+1 51.7	.....	.....	- 7 5 56.7
	ϕ Aquarii.....	39.2	41.1	+0.1	62 53 40.3	.....	48.1	29.20	50.0	+1 50.8	.....	.....	- 6 54 33.7
	π^1 Piscium.....	38.8	42.5	+0.1	55 36 40.7	.....	.....	.....	.....	+1 23.0	.....	.....	+ 0 22 53.7
Sept. 22	(a) α Pegasi.....	15.9	20.9	0.0	41 39 18.4	- 0.1	49.0	29.37	51.3	+0 50.8	56.9	57.5	+14 20 48.4
	Uranus.....	53.0	55.0	+0.1	63 5 54.1	.....	.....	.....	.....	+1 52.2	.....	.....	- 7 6 48.8
	ϕ Aquarii.....	40.0	40.0	+0.1	62 53 40.2	.....	.....	.....	.....	+1 51.2	.....	.....	- 6 54 33.9
	π^1 Piscium.....	39.2	42.1	+0.1	55 36 40.7	.....	.....	.....	.....	+1 23.4	.....	.....	+ 0 22 53.4
	ι Piscium.....	5.5	11.0	+0.1	51 14 8.4	.....	.....	.....	.....	+1 11.2	57.8	.....	+ 4 45 37.9
	(b) Moon South L.	5.5	9.0	+0.1	58 19 7.4	- 5.7	.....	.....	.....	+1 32.5	.....	.....	- 2 19 36.7
	(c) Moon North L.	29.3	32.5	+0.1	57 45 31.0	+20.7	.....	.....	.....	+1 30.5	.....	.....	- 1 46 24.7
	ω Piscium.....	3.0	8.4	+0.1	50 1 5.6	.....	.....	.....	.....	+1 8.2	.....	.....	+ 5 58 43.7
	α Andromedæ.....	56.2	61.5	-0.1	27 47 58.9	.....	.....	.....	.....	+0 30.2	57.7	.....	+28 12 28.4
	δ^1 Piscium.....	39.6	41.1	+0.1	48 41 41.9	.....	48.0	29.37	49.9	+1 5.1	.....	.....	+ 7 18 10.5
	α Ursæ Majoris.....	7.2	13.3	-0.6	353 24 9.7	.....	.....	.....	.....	-0 6.7	55.5	57.0	+62 36 54.0
	Mercury Centre.....	17.0	20.7	+0.1	47 57 18.8	.....	52.6	29.42	52.5	+1 3.0	.....	.....	+ 8 2 35.2
Sept. 23	Sun South L.	52.0	56.2	+0.1	56 9 54.2	.....	54.5	29.43	53.0	+1 24.3	.....	.....	- 0 10 21.5
	Venus North L.	16.8	21.6	+0.1	70 45 19.3	.....	.....	.....	.....	+2 40.7	.....	.....	- 14 47 3.0
	α Ursæ Minoris S.P.	50.5	56.8	0.0	324 28 53.7	.....	54.2	29.44	53.5	-0 40.6	56.7	.....	+88 27 16.1
	α Serpentis.....	42.9	49.4	+0.1	49 3 46.3	.....	55.4	29.42	54.0	+1 5.0	56.2	.....	+ 6 56 5.7
	δ Ophiuchi.....	56.6	61.1	+0.1	59 15 58.9	.....	55.5	29.43	53.9	+1 34.7	57.7	.....	- 3 16 36.6
	Moon North L.	47.0	51.2	+0.1	50 22 49.3	.....	49.0	29.45	52.5	+1 9.2	.....	.....	+ 5 36 58.5
	(d) ε Piscium.....	5.0	9.8	+0.1	48 58 7.6	- 0.2	.....	.....	.....	+1 5.9	.....	.....	+ 7 1 43.7
	α Ursæ Minoris.....	15.9	22.5	-0.1	327 34 19.1	.....	48.0	29.45	51.9	-0 36.7	59.0	.....	+88 27 14.6
	η Piscium.....	50.5	56.0	0.0	41 28 53.3	.....	.....	.....	.....	+0 50.8	.....	.....	+14 31 12.9
	(d) Juno.....	36.0	38.7	+0.1	55 26 37.4	- 0.7	.....	.....	.....	+1 23.2	.....	.....	+ 0 32 57.1
Sept. 24	(e) Sun North L.	20.8	24.6	+0.1	56 1 22.7	- 0.5	56.6	29.35	54.4	+1 23.2	.....	57.0	- 0 1 48.4
	(f) α Ursæ Minoris S. P.	51.9	59.0	0.0	324 28 55.5	- 1.2	.....	.....	.....	-0 40.3	57.2	.....	+88 27 17.0
	(g) α Aquarii.....	8.3	13.3	+0.1	57 5 10.9	- 0.7	56.0	29.22	54.5	+1 26.4	56.8	.....	- 1 5 39.6
	α Andromedæ.....	55.9	61.8	-0.1	27 47 58.9	.....	55.0	29.21	55.4	+0 29.6	57.5	.....	+28 12 28.5
	(a) γ Pegasi.....	21.8	28.1	0.0	41 42 24.8	- 0.1	.....	.....	.....	+0 50.0	56.7	.....	+14 17 42.3
	(h) α Ursæ Minoris.....	11.5	18.4	-0.1	327 34 14.9	+ 1.0	55.0	29.21	55.2	-0 35.8	57.0	.....	+88 27 16.9
	Mercury Centre.....	34.2	37.9	+0.1	48 57 36.3	.....	56.2	29.04	55.8	+1 3.9	.....	57.0	+ 7 2 16.8
Sept. 25	η Ursæ Majoris.....	47.1	53.0	-0.5	5 53 49.6	.....	56.9	29.12	56.0	+0 5.7	56.2	.....	+50 7 1.7
	η Bootis.....	54.2	60.1	0.0	36 47 57.3	.....	.....	.....	.....	+0 41.7	58.5	.....	+19 12 18.0
	α Bootis.....	57.2	62.9	0.0	35 59 0.1	.....	56.9	29.13	55.9	+0 40.5	56.2	.....	+20 1 16.4
	(d) Mercury Centre.....	40.2	36.2	+0.1	49 31 33.2	- 1.2	55.9	29.24	55.5	+1 5.7	.....	56.0	+ 6 28 18.3
	γ Ursæ Majoris.....	41.0	46.4	-0.5	1 25 43.2	.....	.....	.....	.....	+0 1.3	55.4	.....	+54 35 11.5
Sept. 26	Sun South L.	2.0	5.9	+0.1	57 20 4.0	.....	55.2	29.24	55.4	+1 27.4	.....	.....	- 1 20 35.4
	(i) 12 Canum Venat.....	26.4	30.8	-0.3	16 49 28.3	+ 0.5	.....	.....	.....	+0 16.9	57.1	.....	+39 11 10.3
	(d) Venus North L.	2.7	7.5	+0.1	70 27 5.1	- 0.3	.....	.....	.....	+2 36.5	.....	.....	- 14 28 45.3
	(d) α Ursæ Minoris S. P.	50.6	55.9	0.0	324 28 53.3	.....	56.1	29.26	56.3	-0 40.2	55.6	.....	+88 27 17.1
Sept. 28	(k) β Cephei.....	27.8	33.0	-0.5	346 9 29.9	+ 0.7	50.2	29.07	53.3	-0 11.0	56.1	56.7	+69 51 40.1
	ε Pegasi.....	12.4	17.2	+0.1	46 51 14.8	.....	.....	.....	.....	+1 0.2	56.0	.....	+ 9 8 41.7
	α Aquarii.....	7.5	13.0	+0.1	57 5 10.3	.....	.....	.....	.....	+1 27.0	57.6	.....	- 1 5 40.6
	α Ursæ Minoris.....	11.8	17.8	-0.1	327 34 14.7	.....	48.8	29.04	50.0	-0 36.1	57.1	.....	+88 27 18.1
	Juno.....	19.8	53.0	+0.1	56 33 51.5	.....	49.0	29.05	50.3	+1 25.5	.....	.....	- 0 34 20.4
Sept. 29	π Aurigæ.....	20.0	21.2	-0.2	26 27 21.8	.....	42.0	29.47	49.0	+0 29.0	.....	57.5	+29 33 6.7
	μ Geminorum.....	17.9	51.8	-0.1	33 21 43.8	.....	.....	.....	.....	+0 38.4	59.3	.....	+22 35 29.3
(a) At Wire IV.													

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.										observed.	adopted.	
Sept. 29	51 (Hev.) Cephei.....	53.8	59.2	- 0.1	328	45	56.3	.....	.....	.....	.....	- 0 35.5	57.4	57.5	+ 87 15 36.7
	(a) δ Ursæ Minoris S. P.	21.0	24.1	+ 0.1	322	37	22.5	- 0.4	.....	.....	.....	- 0 44.7	58.4	.....	+ 86 35 39.9
	ϵ Geminorum	13.6	16.9	- 0.1	30	43	15.2	.....	.....	.....	.....	+ 0 34.6	.....	.....	+ 25 17 7.7
	α Canis Majoris.....	35.5	39.4	+ 0.1	72	27	37.7	.....	.....	.....	.....	+ 3 2.0	56.2	.....	- 16 29 42.2
	Moon South L.....	34.1	38.0	- 0.1	28	59	36.0	.....	.....	.....	.....	+ 0 32.3	.....	.....	+ 27 0 49.2
	δ Geminorum	51.3	56.1	- 0.1	33	43	53.7	.....	42.4	29.48	45.8	+ 0 38.9	56.9	.....	+ 22 16 24.9
	ϵ Geminorum.....	40.0	45.8	- 0.1	27	53	42.9	.....	.....	.....	.....	+ 0 30.8	.....	.....	+ 28 6 43.8
	β Geminorum.....	51.5	57.0	- 0.1	27	35	54.1	.....	42.9	29.50	45.9	+ 0 30.4	56.6	.....	+ 28 24 33.0
Oct. 1	(b) Mercury Centre	17.8	22.0	+ 0.1	53	32	19.9	+ 1.4	48.9	29.17	50.0	+ 1 16.7	.....	57.2	+ 2 27 19.2
Oct. 2	Sun South L.	13.0	16.5	+ 0.1	59	40	14.8	.....	50.0	29.17	50.6	+ 1 36.5	.....	.....	- 3 40 54.1
	12 Canum Venat.....	29.5	32.2	- 0.3	16	49	30.6	.....	.....	.....	.....	+ 0 17.1	57.5	.....	+ 39 11 9.5
	α Ursæ Minoris S. P.	53.4	60.0	0.0	324	28	56.8	.....	.....	.....	.....	- 0 40.6	56.4	.....	+ 88 27 19.0
	(c) η Bootis.....	56.5	60.9	0.0	36	47	58.8	- 0.1	50.4	29.18	50.8	+ 0 42.4	59.5	.....	+ 19 12 16.1
	(d) ϵ Bootis.....	8.9	14.2	- 0.1	28	15	11.4	- 0.1	50.4	29.20	51.0	+ 0 30.5	57.4	.....	+ 27 45 15.4
	λ Ursæ Minoris.....	38.8	43.8	0.0	327	11	41.2	.....	45.0	29.31	48.9	- 0 37.3	55.9	.....	+ 88 49 53.3
	Uranus.....	7.5	9.4	+ 0.1	63	14	8.6	.....	43.5	29.32	45.3	+ 1 54.1	.....	.....	- 7 15 5.5
	α Ursæ Minoris	10.7	16.5	- 0.1	327	34	13.5	.....	43.4	29.36	45.0	- 0 36.9	56.6	.....	+ 88 27 20.6
	Juno	53.3	56.8	+ 0.1	57	28	55.2	.....	43.7	29.35	45.1	+ 1 30.4	.....	.....	- 1 29 28.4
Oct. 3	Sun North L.....	30.6	33.5	+ 0.1	59	31	32.1	.....	50.7	29.44	50.0	+ 1 36.8	.....	56.7	- 3 32 12.2
	α Ursæ Minoris S. P.	54.2	60.3	0.0	324	28	57.3	.....	.....	.....	.....	- 0 40.9	56.2	.....	+ 88 27 19.7
	ζ Ursæ Majoris.....	3.0	7.3	- 0.5	0	15	4.6	.....	.....	.....	.....	+ 0 0.2	57.2	.....	+ 55 45 51.9
Oct. 4	η Draconis	11.0	16.8	- 0.6	354	8	13.4	.....	47.8	29.55	49.6	- 0 6.0	57.6	57.1	+ 61 52 49.7
	ζ Cygni	54.2	58.0	- 0.2	26	25	55.8	.....	42.8	29.68	47.5	+ 0 29.1	56.2	.....	+ 29 34 32.2
	α Cephei.....	19.2	24.0	- 0.6	354	6	20.9	.....	.....	.....	.....	- 0 6.1	56.9	.....	+ 61 54 42.2
	Uranus.....	39.0	41.0	+ 0.1	63	15	40.1	.....	41.9	29.73	46.7	+ 1 56.1	.....	.....	- 7 16 39.1
	α Ursæ Minoris.....	11.6	17.3	- 0.1	327	34	14.4	.....	41.0	29.76	44.5	- 0 37.6	57.6	.....	+ 88 27 20.3
	Juno	34.2	38.2	+ 0.1	57	56	36.2	.....	40.9	29.76	44.0	+ 1 33.9	.....	.....	- 1 57 13.0
	Mercury Centre.....	19.1	22.6	+ 0.1	55	46	20.9	.....	45.3	29.91	46.7	+ 1 26.1	.....	57.5	+ 0 13 10.5
	Venus North L.	15.6	19.6	+ 0.1	68	17	17.6	.....	.....	.....	.....	+ 2 26.2	.....	.....	- 12 18 46.3
Oct. 5	Sun South L.....	52.8	56.0	+ 0.1	60	49	54.5	.....	45.8	29.90	47.0	+ 1 44.6	.....	.....	- 4 50 41.6
	α Ursæ Minoris S. P.	56.6	62.3	0.0	324	28	59.5	.....	.....	.....	.....	- 0 42.0	56.5	.....	+ 88 27 20.0
	ζ Ursæ Majoris.....	2.9	8.0	- 0.5	0	15	4.9	.....	.....	.....	.....	+ 0 0.2	56.7	.....	+ 55 45 52.4
	η Ursæ Majoris.....	52.1	56.2	- 0.5	5	53	53.7	.....	.....	.....	.....	+ 0 6.0	57.7	.....	+ 50 6 57.8
	α Bootis	0.1	4.9	0.0	35	59	2.6	.....	47.4	29.91	48.0	+ 0 42.4	59.0	.....	+ 20 1 12.5
	Uranus.....	25.0	26.3	+ 0.1	63	16	25.7	.....	44.0	29.98	46.5	+ 1 56.7	.....	.....	- 7 17 24.9
	α Ursæ Minoris	10.9	17.1	- 0.1	327	34	13.9	.....	43.0	29.98	44.8	- 0 37.7	57.4	.....	+ 88 27 21.3
	Juno	25.5	29.5	+ 0.1	58	10	27.6	.....	43.0	29.98	45.0	+ 1 35.0	.....	.....	- 2 11 5.1
Oct. 7	(d) Sun North L.....	2.5	6.4	+ 0.1	61	4	4.6	- 0.5	52.4	29.84	51.7	+ 1 43.9	.....	57.3	- 5 4 50.7
	β Draconis	20.1	26.3	- 0.5	3	35	22.7	.....	52.0	29.74	52.0	+ 0 3.6	57.0	.....	+ 52 25 31.0
	γ Draconis	2.8	9.0	- 0.5	4	30	5.4	.....	.....	.....	.....	+ 0 4.5	56.9	.....	+ 51 30 47.4
	α Aquarii.....	6.1	11.0	+ 0.1	57	5	8.6	.....	49.5	29.64	50.0	+ 1 28.8	57.9	.....	- 1 5 40.1
Oct. 8	β Aquarii.....	24.3	28.0	+ 0.1	62	15	26.2	.....	51.0	29.50	51.4	+ 1 48.3	56.3	56.9	- 6 16 17.6
	ϵ Pegasi.....	12.5	17.5	+ 0.1	46	51	15.0	.....	.....	.....	.....	+ 1 1.0	57.6	.....	+ 9 8 40.9
	α Aquarii.....	5.9	11.0	+ 0.1	57	5	8.5	.....	.....	.....	.....	+ 1 28.1	57.1	.....	- 1 5 39.7
	(e) α Ursæ Minoris	55.3	62.0	- 0.1	327	33	58.6	+ 12.2	49.0	29.45	50.4	- 0 36.6	56.5	.....	+ 88 27 22.7
	Juno	39.9	43.0	+ 0.1	58	51	41.5	.....	.....	.....	.....	+ 1 34.6	.....	.....	- 2 52 19.2
Oct. 9	Sun South L.	0.5	4.0	+ 0.1	62	22	2.2	.....	54.6	29.30	53.5	+ 1 47.2	.....	57.4	- 6 22 52.0
	α Cephei	17.4	23.0	- 0.6	354	6	19.5	.....	49.0	29.28	51.2	- 0 6.0	56.7	.....	+ 61 54 43.9
	β Aquarii.....	27.0	30.0	+ 0.1	62	15	28.6	.....	.....	.....	.....	+ 1 47.9	58.3	.....	- 6 16 19.1
	(f) β Cephei	26.1	32.5	- 0.5	346	9	28.8	+ 0.4	.....	.....	.....	- 0 14.1	57.3	.....	+ 69 51 42.3
(a) At 6 ^h 27 ^m 0 ^s . (b) At Wire I.															
(c) 30 ^s after transit. (d) At Wire IV.															
(e) At 1 ^h 18 ^m 15 ^s ; tremulous. (f) 40 ^s before transit.															

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.		observed.	adopted.									
Oct. 9	Venus North L.	7.0	11.4	+0.1	66	30	9.3	.....	54.9	29.04	52.5	+2 7.6	.....	56.8	- 10 31 20.1
	(a) α Ursæ Minoris S.P.	0.0	6.8	0.0	324	29	3.5	- 4.6	.....	.....	.....	- 0 40.0	56.0	.....	+ 88 27 22.1
Oct. 10	Sun North L.	48.8	52.5	+0.1	62	12	50.9	.....	55.7	29.06	53.2	+1 45.4	.....	.....	- 6 13 39.5
	β Cephei	25.9	31.8	-0.5	346	9	28.4	.....	52.3	29.15	52.9	-0 14.0	56.8	.....	+69 51 42.4
	ϵ Pegasi	12.2	18.1	+0.1	46	51	15.2	.....	.....	.....	.....	+1 0.1	57.0	.....	+ 9 8 41.5
	α Aquarii	7.2	12.9	+0.1	57	5	10.1	.....	.....	.....	.....	+1 26.9	57.5	.....	- 1 5 40.2
	Uranus	5.5	9.4	+0.1	63	20	7.5	.....	52.3	29.18	52.9	+1 51.8	.....	.....	- 7 21 2.5
	Juno	51.0	55.0	+0.1	59	18	53.2	.....	52.7	29.21	52.7	+1 34.8	.....	.....	- 3 19 31.2
	Venus North L.	17.9	21.3	+0.1	66	7	19.6	.....	57.2	29.32	53.9	+2 6.0	.....	56.3	-10 8 29.3
	(b) α Ursæ Minoris S.P.	58.0	63.5	0.0	324	29	0.8	- 1.6	.....	.....	.....	- 0 40.2	55.7	.....	+ 88 27 22.7
	Sun South L.	37.1	38.4	+0.1	63	7	38.0	.....	57.0	29.34	55.1	+1 50.3	.....	.....	- 7 8 32.0
	η Ursæ Majoris	52.9	58.2	-0.5	5	53	55.1	.....	.....	.....	.....	+0 5.8	57.0	.....	+50 6 55.4
Oct. 11	β Ursæ Minoris	34.1	40.1	-0.4	341	12	36.8	.....	56.9	29.35	55.4	-0 19.2	56.1	.....	+74 48 38.7
	(c) Uranus	24.2	27.3	+0.1	63	21	25.8	- 0.8	48.1	29.67	51.9	+1 54.8	.....	57.6	- 7 22 22.2
Oct. 12	ι Piscium	4.0	8.5	+0.1	51	14	6.4	.....	.....	.....	.....	+1 11.9	57.5	.....	+ 4 45 39.3
	(d) γ Cephei	47.6	53.2	-0.4	339	16	49.9	+ 0.4	.....	.....	.....	-0 22.0	57.1	.....	+76 44 29.3
	(e) α Andromedæ	52.8	58.0	-0.1	27	47	55.4	- 0.1	48.8	29.69	51.5	+0 30.5	58.1	.....	+28 12 31.8
	α Ursæ Minoris	7.8	14.4	-0.1	327	34	11.0	.....	47.0	29.70	50.8	-0 37.1	57.8	.....	+88 27 23.7
	(e) Juno	28.1	31.9	+0.1	59	45	30.1	- 0.4	47.3	.....	.....	+1 39.2	.....	.....	- 3 46 11.3
	α Coronæ borealis ...	52.4	57.8	-0.1	28	44	55.0	.....	54.5	29.55	52.6	+0 31.2	57.5	56.9	+27 15 30.7
Oct. 13	α Serpentis	44.5	50.1	+0.1	49	3	47.5	.....	.....	.....	.....	+1 5.5	56.4	.....	+ 6 56 3.9
	ζ Ursæ Minoris	10.8	16.1	-0.3	337	44	13.2	.....	.....	.....	.....	-0 23.4	56.9	.....	+78 17 7.1
	δ Draconis	11.7	16.5	-0.6	357	1	13.4	.....	.....	.....	.....	-0 3.0	.....	.....	+58 59 46.5
	Sun North L.	29.5	32.0	+0.1	64	5	30.8	.....	50.9	29.46	51.0	+1 57.0	.....	57.7	- 8 6 30.1
Oct. 15	η Ursæ Majoris	53.9	59.0	-0.5	5	53	56.0	.....	.....	.....	.....	+0 5.9	56.7	.....	+50 6 55.8
	η Bootis	57.5	61.5	0.0	36	47	59.6	.....	.....	.....	.....	+0 42.7	58.4	.....	+19 12 15.4
	α Piscis Australis	52.8	55.5	+0.2	86	16	54.2	.....	47.0	29.41	49.5	+12 8.6	.....	.....	-30 28 5.1
	(f) α Pegasi	12.9	19.0	0.0	41	39	16.0	- 0.1	.....	.....	.....	+0 51.1	57.2	.....	+14 20 50.7
	(g) Uranus	30.9	23.5	+0.1	63	23	22.4	- 1.1	.....	.....	.....	+1 54.3	.....	.....	- 7 24 17.9
	α Ursæ Minoris	7.4	13.2	-0.1	327	34	10.2	.....	44.9	29.40	48.0	-0 36.9	58.4	.....	+88 27 24.4
	Juno	20.4	23.0	+0.1	60	24	21.8	.....	45.0	.....	.....	+1 41.3	.....	.....	- 4 25 5.4
	(h) Venus South L.	28.0	30.2	+0.1	64	14	29.2	0.0	51.0	29.45	50.2	+1 57.7	.....	57.6	- 8 15 29.3
	(i) Venus North L.	35.9	....	+0.1	63	51	37.0	- 0.3	.....	.....	.....	+1 57.3	.....	57.6	- 7 52 36.4
	Venus South L.	35.0	37.2	+0.1	63	52	36.3	.....	49.8	29.75	50.4	+1 57.3	.....	.....	- 7 53 36.0
Oct. 16	(k) α Ursæ Minoris S.P.	2.5	8.0	0.0	324	29	5.3	- 1.7	50.9	.....	.....	-0 41.4	56.5	.....	+88 27 24.6
	(l) ζ Ursæ Majoris	6.0	11.3	-0.5	0	15	8.1	+ 0.8	.....	.....	.....	+0 0.2	56.9	.....	+55 45 48.5
Oct. 17	η Ursæ Majoris	54.8	60.2	-0.5	5	53	57.1	.....	.....	.....	.....	+0 5.9	57.1	.....	+50 6 54.6
	η Bootis	58.0	62.9	0.0	36	48	0.6	.....	50.9	29.77	51.1	+0 43.2	59.5	.....	+19 12 13.8
	Moon South L.	57.5	62.2	+0.1	74	40	59.9	.....	48.1	29.84	50.8	+3 29.1	.....	.....	-18 43 31.4
	δ Capricorni	54.5	57.9	+0.1	72	48	56.2	.....	.....	.....	.....	+3 5.8	.....	.....	-16 51 4.4
	ι Aquarii	50.4	54.0	+0.1	70	36	52.2	.....	.....	.....	.....	+2 43.8	.....	.....	-14 38 38.4
	α Ursæ Minoris	6.4	12.6	-0.1	327	34	9.4	.....	46.6	29.81	49.9	-0 37.2	58.1	.....	+88 27 25.4
	Juno	20.0	22.4	+0.1	60	49	21.3	.....	46.0	.....	.....	+1 44.2	.....	.....	- 4 50 7.9
	(m) Venus South L.	16.3	19.2	+0.1	63	31	17.8	- 0.3	.....	.....	.....	+1 56.4	.....	57.0	- 7 32 16.9
	(n) Venus North L.	20.9	23.2	+0.1	63	30	22.1	.....	45.2	29.68	49.2	+1 56.4	.....	.....	- 7 31 21.5
	α Ursæ Minoris S.P.	1.4	7.2	0.0	324	29	4.4	.....	.....	.....	.....	-0 41.7	56.7	.....	+88 27 25.7
Oct. 18	Sun South L.	47.2	50.8	+0.1	65	43	49.2	.....	45.5	29.66	48.7	+2 8.3	.....	.....	- 9 45 0.5
	(c) α Bootis	1.8	6.6	0.0	35	59	4.3	- 0.1	45.7	.....	.....	+0 42.2	57.9	.....	+20 1 10.6
	(o) β Ursæ Minoris	38.0	43.2	-0.4	341	12	40.3	0.0	47.0	29.64	48.6	-0 19.8	56.6	.....	+74 48 36.5
(a) At 12 ^h 53 ^m 45 ^s .		(c) At Wire IV.		(i) At Wire I.: correction				(k) At 13 ^h 8 ^m 50 ^s .				(n) Correction for defect of			
(b) At 12 ^h 57 ^m 40 ^s .		(f) 10 ^s after transit.		for defect of illumina-				(l) At Wire V.				illumination 0".2.			
(c) 1 ^m after transit.		(g) At 23 ^h 0 ^m 25 ^s .		tion 0".1.				(m) At Wire I.				(o) At 14 ^h 52 ^m 0 ^s .			
(d) At 23 ^h 34 ^m 20 ^s .		(h) At 12 ^h 15 ^m 36 ^s .													

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.		
		I.	II.								observed.	adopted.			
Oct. 18	ϵ Ursæ Minoris.....	53.2	58.9	-0.2	333 43 55.9	.....	47.6	29.62	49.4	-0 28.7	56.9	57.0	+82 17 29.8		
	51 (Hev.) Cephei S.P.	15.2	21.5	+0.1	323 17 18.3	.....	.....	.....	.....	-0 43.4	57.7	.....	+87 15 37.9		
	(a) δ Ursæ Minoris.....	49.0	55.0	-0.1	329 25 51.9	+ 0.6	46.2	29.63	49.0	-0 34.4	56.5	.....	+86 35 38.9		
	(b) δ Capricorni	54.0	57.0	+0.1	72 48 55.7	- 0.8	45.0	29.64	48.3	+3 5.8	.....	.....	-16 51 3.7		
	Aquarii.....	49.7	53.1	+0.1	70 36 51.4	.....	.....	.....	.....	+2 43.8	.....	.....	-14 38 38.2		
	Moon South L.	57.5	61.5	+0.1	68 47 59.7	.....	.....	.....	.....	+2 28.9	.....	.....	-12 49 31.6		
	(c) 58 Aquarii.....	1.1	5.0	+0.1	67 42 3.0	- 0.8	.....	.....	.....	+2 20.9	.....	.....	-11 43 26.1		
	(d) Venus South L.	36.0	37.1	+0.1	63 10 36.6	- 0.2	.....	.....	.....	+1 55.3	.....	57.9	- 7 11 33.8		
	(c) Venus North L.	40.8	42.0	+0.1	63 9 41.5	+ 0.1	42.5	29.69	46.9	+1 55.3	.....	.....	- 7 10 39.0		
	α Ursæ Minoris S. P.	2.4	8.0	0.0	324 29 5.3	.....	.....	.....	.....	-0 41.9	57.0	.....	+88 27 25.5		
Oct. 19	ζ Ursæ Majoris.....	9.0	13.5	-0.5	0 15 10.7	.....	.....	.....	.....	+0 0.2	58.0	.....	+55 45 47.0		
	Sun North L.	29.6	32.0	+0.1	65 33 31.0	.....	44.6	29.69	46.8	+2 7.6	.....	.....	- 9 34 40.7		
	η Ursæ Majoris.....	56.8	60.8	-0.5	5 53 58.4	.....	.....	.....	.....	+0 6.0	57.8	.....	+50 6 53.5		
	(f) η Bootis.....	59.7	64.1	0.0	36 48 2.0	- 0.1	.....	.....	.....	+0 43.6	60.8	.....	+19 12 12.4		
	51 (Hev.) Cephei S.P.	16.0	20.3	+0.1	323 17 18.1	.....	.....	.....	.....	-0 43.6	57.2	.....	+87 15 36.6		
	(g) δ Ursæ Minoris.....	50.4	56.3	-0.1	329 25 53.2	+ 0.2	45.7	29.70	48.7	-0 34.6	57.1	.....	+86 35 39.1		
	λ Aquarii.....	40.3	43.0	+0.1	64 24 41.8	.....	.....	.....	.....	+2 1.5	.....	.....	- 8 25 45.4		
	α Piscis Australis....	51.9	52.6	+0.2	86 16 52.3	.....	44.0	29.72	46.2	+12 22.3	.....	.....	-30 28 16.7		
	Uranus	42.0	43.3	+0.1	63 25 42.7	.....	.....	.....	.....	+1 56.4	.....	.....	- 7 26 41.2		
	(h) 96 Aquarii.....	55.6	59.9	+0.1	61 58 57.9	+ 0.1	.....	.....	.....	+1 49.5	.....	.....	- 5 59 49.6		
Oct. 20	Moon South L.	25.0	28.6	+0.1	62 4 26.9	.....	.....	.....	.....	+1 50.0	.....	.....	- 6 5 19.0		
	λ Piscium.....	28.5	31.8	+0.1	55 5 30.2	.....	.....	.....	.....	+1 23.7	.....	.....	+ 0 54 4.0		
	29 Piscium	16.1	19.3	+0.1	59 54 17.8	.....	43.4	29.72	45.6	+1 40.7	.....	.....	- 3 55 0.6		
	α Ursæ Minoris.....	5.5	11.3	-0.1	327 34 8.3	.....	43.1	29.73	45.2	-0 37.4	57.5	.....	+88 27 27.0		
	Juno	27.8	29.2	+0.1	61 13 28.7	.....	43.0	.....	.....	+1 46.4	.....	.....	- 5 14 17.2		
	β Pegasi.....	17.7	18.1	-0.1	28 47 17.7	.....	46.3	29.71	48.6	+0 32.0	56.4	58.3	+27 13 8.6		
	λ Piscium.....	29.1	32.2	+0.1	55 5 30.7	.....	.....	.....	.....	+1 23.2	.....	.....	+ 0 54 4.4		
	29 Piscium.....	18.1	21.2	+0.1	59 54 19.8	.....	.....	.....	.....	+1 40.1	.....	.....	- 3 55 1.6		
	α Andromedæ.....	52.8	57.1	-0.1	27 47 55.0	.....	.....	.....	.....	+0 30.7	59.3	.....	+28 12 32.6		
	Moon South L.	26.3	28.7	+0.1	54 50 27.6	.....	46.1	29.72	48.5	+1 22.5	.....	.....	+ 1 9 8.2		
Oct. 21	α Cassiopeæ.....	16.4	20.3	-0.5	0 21 17.8	.....	.....	.....	.....	+0 0.3	58.7	.....	+55 39 40.2		
	α Ursæ Minoris.....	5.8	12.2	-0.1	327 34 8.9	.....	45.2	29.71	48.2	-0 37.2	58.7	.....	+88 27 26.6		
	(f) Venus South L.	36.6	38.0	+0.1	62 31 37.3	0.0	50.8	29.65	48.4	+1 50.2	.....	57.4	- 6 32 30.1		
	α Ursæ Minoris S. P.	2.5	8.0	0.0	324 29 5.3	.....	.....	.....	.....	-0 41.1	57.0	.....	+88 27 26.8		
	α Bootis	3.5	8.0	0.0	35 59 5.8	.....	54.0	29.63	51.2	+0 41.4	58.1	.....	+20 1 10.2		
	β Draconis	23.9	28.1	-0.5	3 35 25.5	.....	54.7	29.63	51.2	+0 3.5	57.6	.....	+52 25 28.4		
	(f) γ Draconis.....	4.0	10.5	-0.5	4 30 6.7	+ 0.1	.....	.....	.....	+0 4.6	56.7	.....	+51 30 46.0		
	α Ursæ Minoris S. P.	4.8	9.2	0.0	324 29 7.0	.....	48.0	30.14	49.8	-0 42.1	56.2	56.5	+88 27 28.4		
	ζ Ursæ Majoris.....	10.0	15.4	-0.5	0 15 12.2	.....	.....	.....	.....	+0 0.2	57.2	.....	+55 45 44.1		
	(f) η Ursæ Majoris.....	57.4	61.5	-0.5	5 53 59.0	0.0	.....	.....	.....	+0 6.0	56.3	.....	+50 6 51.5		
Oct. 25	Sun South L.	9.7	13.8	+0.1	68 13 12.0	.....	48.9	30.15	49.9	+2 25.8	.....	.....	-12 14 41.3		
	(i) ϵ Ursæ Minoris	54.7	59.9	-0.2	333 43 57.2	+ 0.1	47.8	30.16	49.6	-0 29.2	56.2	.....	+82 17 28.4		
Oct. 26	(k) γ Cephei	44.5	48.5	-0.4	339 16 46.0	0.0	45.2	30.15	47.5	-0 22.5	56.8	57.3	+76 44 33.8		
	(l) α Cassiopeæ.....	13.1	18.1	-0.5	0 21 15.0	- 0.1	.....	.....	.....	+0 0.3	57.4	.....	+55 39 42.1		
	(m) α Ursæ Minoris.....	54.5	60.0	-0.1	327 33 57.2	+ 8.3	.....	.....	.....	-0 37.8	57.7	.....	+88 27 29.6		
	.....	3.9	9.8	-0.1	327 34 6.8	.....	44.4	30.15	47.5	-0 37.8	.....	.....	+88 27 28.3		
Oct. 27	α Ursæ Minoris S. P.	6.7	12.0	0.0	324 29 9.4	.....	44.8	30.30	47.3	-0 42.6	57.0	57.3	+88 27 29.5		
	(n) ζ Ursæ Majoris	11.5	16.7	-0.5	0 15 13.6	+ 0.3	.....	.....	.....	+0 0.2	57.8	.....	+55 45 43.2		
	η Ursæ Majoris.....	0.5	5.1	-0.5	5 54 1.9	.....	.....	.....	.....	+0 6.1	58.2	.....	+50 6 49.3		

(a) At 18^h 26^m 40^s.
(b) 48^s after transit.
(c) 54^s after transit.
(d) 30^s before transit.

(e) At Wire V.: Correc-
tion for defect of illu-
mination 0^s.3.
(f) At Wire IV.

(g) At 18^h 25^m 45^s.
(h) At Wire II.
(i) At 17^h 3^m 50^s.
(k) At 23^h 33^m 50^s.

(l) 15^s after transit.
(m) At 0^h 50^m 40^s.
(n) 48^s after transit.

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.										observed.	adopted.	
Oct. 28	(a) Sun North L.	26.2	30.0	+0.1	68	42	28.1	- 1.0	46.0	30.30	47.3	+ 2 31.1	.....	.....	-12 44 0.9
	(b) ϵ Bootis	12.7	18.6	-0.1	28	15	15.5	+ 0.1	.....	.....	.....	+ 0 31.9	57.3	.....	+27 45 9.8
	(c) Mercury Centre.....	15.2	18.5	+0.1	71	58	17.0	- 3.8	.....	.....	.....	+ 3 0.3	.....	.....	-16 0 16.2
	δ Ursæ Minoris.....	52.2	56.8	-0.1	329	25	54.3	.....	.....	.....	.....	- 0 35.4	56.3	.....	+86 35 38.4
	(d) 51 (Hev.) Cephei S.P.	18.5	23.4	+0.1	323	17	20.9	- 0.8	43.8	30.30	47.0	- 0 44.7	57.2	.....	+87 15 38.1
	(e) α Ursæ Minoris S. P.	9.8	14.5	0.0	324	29	12.2	- 3.4	46.0	30.31	47.0	- 0 42.6	56.5	58.3	+88 27 27.9
	.....	6.8	12.8	0.0	324	29	9.8	.....	.....	.....	.....	- 0 42.6	.....	.....	+88 27 28.9
	η Ursæ Majoris.....	0.5	5.0	-0.5	5	54	2.3	.....	.....	.....	.....	+ 0 6.1	58.3	.....	+50 6 49.9
Oct. 29	η Bootis	0.0	4.3	0.0	36	48	2.3	.....	.....	.....	.....	+ 0 44.5	59.9	.....	+19 12 11.5
	ϵ Bootis	14.1	19.1	-0.1	28	15	16.5	.....	45.0	30.30	46.7	+ 0 32.0	58.0	.....	+27 45 9.8
	α Piscis Australis.....	24.0	25.0	+0.2	86	16	24.6	.....	42.2	30.27	45.5	+12 38.5	.....	.....	-30 28 4.8
	Uranus	32.7	34.3	+0.1	63	30	33.6	.....	.....	.....	.....	+ 1 59.4	.....	.....	- 7 31 34.7
	α Ursæ Minoris.....	4.2	9.0	-0.1	327	34	6.5	.....	41.5	30.26	45.4	- 0 38.2	58.6	.....	+88 27 30.0
	(f) Moon South L.	34.7	.....	0.0	39	6	37.3	+ 3.0	.....	.....	.....	+ 0 48.5	.....	57.6	+16 53 28.8
	(g)	42.0	47.4	0.0	39	6	44.6	- 4.6	42.4	30.22	45.5	+ 0 48.5	.....	.....	+16 53 29.1
	η Ursæ Majoris.....	1.0	4.9	-0.5	5	54	2.5	.....	45.9	30.19	46.3	+ 0 6.1	58.1	.....	+50 6 49.0
Oct. 30	(h) α Bootis	4.9	8.5	0.0	35	59	6.7	- 0.1	.....	.....	.....	+ 0 42.9	58.4	.....	+20 1 8.1
	Sun South L.	34.2	35.0	+0.1	69	54	34.7	.....	46.4	30.19	46.8	+ 2 40.2	.....	.....	-13 56 17.3
	(i) β Ursæ Minoris.....	43.0	48.0	-0.4	341	12	45.1	+ 0.2	46.7	.....	.....	- 0 20.2	56.7	.....	+74 48 32.5
Oct. 31	δ Ursæ Minoris.....	52.9	58.1	-0.1	329	25	55.4	.....	45.4	30.13	46.6	- 0 35.1	57.4	.....	+86 35 37.3
	(k) β Ursæ Minoris.....	43.5	48.1	-0.4	341	12	45.4	+ 0.6	46.2	29.93	46.7	- 0 20.1	57.1	57.7	+74 48 31.8
	(h) α Lyrae.....	13.0	16.9	-0.3	17	22	14.7	0.0	45.2	29.91	46.4	+ 0 18.3	58.0	.....	+38 38 24.7
Nov. 5	(l) β Lyrae.....	32.9	37.4	-0.2	22	49	34.9	+ 0.4	.....	.....	.....	+ 0 24.7	58.0	.....	+33 10 57.7
	β Pegasi.....	17.2	22.5	-0.1	28	47	19.8	.....	.....	.....	.....	+ 0 31.9	59.9	58.1	+27 13 6.4
	(a) Uranus.....	0.2	1.5	+0.1	63	33	0.9	- 0.4	43.0	29.44	45.0	+ 1 56.2	.....	.....	- 7 33 58.6
	ϵ Piscium	4.0	8.4	+0.1	51	14	6.3	.....	.....	.....	.....	+ 1 12.3	57.9	.....	+ 4 45 39.5
	γ Pegasi.....	17.8	23.0	0.0	41	42	20.4	.....	42.5	29.46	44.9	+ 0 51.8	57.5	.....	+14 17 45.9
Nov. 7	α Ursæ Minoris.....	58.7	64.1	-0.1	327	34	1.3	.....	42.8	29.46	44.7	- 0 37.1	57.2	.....	+88 27 33.9
	α Lyrae.....	13.7	17.9	-0.3	17	22	15.5	.....	45.6	29.42	46.5	+ 0 18.0	57.4	57.4	.....
	β Ursæ Minoris.....	45.0	50.3	-0.4	341	12	47.2	.....	.....	.....	.....	- 0 19.4	55.6	57.4	+74 48 29.6
Nov. 8	β Ursæ Minoris.....	45.0	50.3	-0.4	341	12	47.2	.....	.....	.....	.....	- 0 19.4	55.6	57.4	+74 48 29.6
	(a) Sun North L.....	3.5	9.8	+0.1	72	28	6.7	- 1.0	48.5	29.08	48.0	+ 2 57.3	.....	.....	-16 30 5.6
	α Andromedæ.....	49.5	55.7	-0.1	27	47	52.5	.....	49.4	29.02	48.5	+ 0 29.8	58.2	.....	+28 12 35.1
	α Cassiopeæ.....	10.0	15.3	-0.5	0	21	12.2	.....	.....	.....	.....	+ 0 0.3	58.2	.....	+55 39 44.9
Nov. 9	α Ursæ Minoris.....	56.7	62.2	-0.1	327	33	59.3	.....	49.0	28.99	48.7	- 0 36.0	57.7	.....	+88 27 34.1
	β Ursæ Minoris.....	45.5	51.0	-0.4	341	12	47.8	.....	48.0	28.77	48.5	- 0 19.2	55.7	57.1	+74 48 28.5
	Sun South L.....	16.1	20.9	+0.1	73	34	18.5	.....	48.4	.....	.....	+ 3 7.5	.....	.....	-17 36 28.9
	γ Aquilæ.....	16.0	21.2	+0.1	45	46	18.7	.....	.....	.....	.....	+ 0 57.8	58.1	.....	+10 13 40.6
Nov. 10	α Aquilæ.....	52.8	56.1	+0.1	47	32	54.5	.....	47.6	28.81	48.5	+ 1 1.4	57.5	.....	+ 8 27 1.2
	(m) β Ursæ Minoris.....	47.1	51.3	-0.4	341	12	48.8	+ 0.5	45.8	29.05	47.2	- 0 19.5	56.5	57.3	+74 48 27.5
	Sun North L.....	32.4	34.9	+0.1	73	18	33.7	.....	46.8	.....	.....	+ 3 7.0	.....	.....	-17 20 43.4
	α Coronæ borealis.....	59.6	65.3	-0.1	28	45	2.4	.....	.....	.....	.....	+ 0 31.2	57.8	.....	+27 15 23.7
Nov. 11	α Serpentis.....	50.7	54.7	+0.1	49	3	52.8	.....	46.9	.....	.....	+ 1 5.4	57.6	.....	+ 6 55 59.1
	α Lyrae.....	14.3	19.0	-0.3	17	22	16.4	.....	46.2	29.52	47.6	+ 0 18.1	57.3	57.4	+38 38 22.9
	(h) β Lyrae.....	35.5	40.0	-0.2	22	49	37.5	- 0.1	.....	.....	.....	+ 0 24.3	57.9	.....	+33 10 55.7
Nov. 12	α Cephei.....	14.8	19.0	-0.6	354	6	16.3	.....	46.4	29.54	47.5	- 0 6.1	57.1	.....	+61 54 47.2
	α Cephei.....	14.8	19.0	-0.6	354	6	16.3	.....	46.4	29.54	47.5	- 0 6.1	57.1	.....	+61 54 47.2

(a) At Wire V.

(b) 10^s before transit.(c) At 14^h 40^m 25^s.(d) At 18^h 27^m 15^s.(e) At 12^h 55^m 15^s.(f) At 9^h 24^m 9^s.(g) At 9^h 24^m 46^s.

(h) At Wire IV.

(i) At 14^h 52^m 30^s.(k) At 14^h 50^m 50^s.(l) 1^m after transit.(m) At 14^h 52^m 55^s.

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.			Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.		Equatorial Point		Apparent Declination observed.
		I.	II.											observed	adopted.	
Nov. 16	η Draconis.....	23.5	28.2	-0.6	354	8	25.2	.....	53.0	29.25	52.6	-0	5.9	57.3	57.0	+61 52 37.7
	λ Ursæ Minoris.....	34.5	39.7	0.0	327	11	37.1	.....	50.8	29.29	51.0	-0	36.8	55.9	.....	+88 49 56.7
	ι Piscium.....	4.9	9.8	+0.1	51	14	7.4	.....	49.0	29.32	49.8	+1	11.0	57.4	.....	+ 4 45 38.6
	Moon South L.....	14.4	18.9	+0.1	58	17	16.8	.....	.....	.....	.....	+1	32.1	.....	.....	- 2 17 51.9
	ω Piscium.....	1.8	8.0	+0.1	50	1	5.0	.....	.....	.....	.....	+1	8.0	.....	.....	+ 5 58 44.0
	α Andromedæ.....	49.0	53.8	-0.1	27	47	51.3	.....	.....	.....	.....	+0	30.1	57.8	.....	+28 12 35.6
	41 Piscium.....	39.4	43.9	+0.1	48	41	41.8	.....	49.0	29.33	49.8	+1	4.9	.....	.....	+ 7 18 10.3
	α Ursæ Minoris.....	53.4	59.4	-0.1	327	33	56.3	.....	.....	.....	.....	-0	36.5	56.5	.....	+88 27 37.2
	(a) Juno.....	43.8	46.8	+0.1	64	39	45.4	- 0.5	49.0	29.35	49.7	+2	0.0	.....	.....	- 8 40 47.9
Nov. 17	ω Piscium.....	1.6	7.9	+0.1	50	1	4.9	.....	45.0	29.63	48.4	+1	9.3	.....	57.2	+ 5 58 43.0
	α Andromedæ.....	48.0	53.0	-0.1	27	47	50.4	.....	.....	.....	.....	+0	30.7	57.6	.....	+28 12 36.1
	γ Pegasi.....	17.4	22.4	0.0	41	42	19.9	.....	.....	.....	.....	+0	51.9	57.3	.....	+14 17 45.4
	(a) 41 Piscium.....	39.2	43.1	+0.1	48	41	41.3	- 0.2	.....	.....	.....	+1	6.2	.....	.....	+ 7 18 9.9
	Moon South L.....	32.0	35.5	+0.1	51	12	33.8	.....	.....	.....	.....	+1	12.4	.....	.....	+ 4 47 11.0
	β Ceti.....	21.6	25.2	+0.1	74	49	23.5	.....	.....	.....	.....	+3	31.2	.....	.....	-18 51 57.5
	ϵ Piscium.....	3.0	8.2	+0.1	48	58	5.7	.....	.....	.....	.....	+1	6.9	.....	.....	+ 7 1 44.6
	α Ursæ Minoris.....	53.8	59.0	-0.1	327	33	56.3	.....	.....	.....	.....	-0	37.2	56.2	.....	+88 27 38.1
	Juno.....	50.5	53.3	+0.1	64	41	52.0	.....	.....	.....	.....	+2	2.6	.....	.....	- 8 42 57.4
θ^1 Ceti.....	24.6	28.2	+0.1	64	59	26.5	.....	44.0	29.62	47.9	+2	4.3	57.8	.....	- 9 0 33.6	
Nov. 18	(a) γ Pegasi.....	18.0	23.2	0.0	41	42	20.6	- 0.1	47.6	29.53	48.0	+0	51.4	57.4	57.4	.....
Nov. 19	γ Pegasi.....	17.9	23.2	0.0	41	42	20.6	.....	44.1	29.36	46.3	+0	51.5	57.6	58.1	+14 17 46.0
	α Cassiopeæ.....	8.8	13.4	-0.5	0	21	10.6	.....	.....	.....	.....	+0	0.3	58.7	.....	+55 39 47.2
	β Ceti.....	22.8	25.8	+0.1	74	49	24.4	.....	.....	.....	.....	+3	29.6	.....	.....	-18 51 55.9
	α Ursæ Minoris.....	55.0	60.0	-0.1	327	33	57.4	.....	.....	.....	.....	-0	36.9	58.2	.....	+88 27 37.6
	Juno.....	3.3	6.8	+0.1	64	45	5.2	.....	44.0	29.38	46.2	+2	2.0	.....	.....	- 8 46 9.1
	θ^1 Ceti.....	25.9	29.8	+0.1	64	59	27.9	.....	.....	.....	.....	+2	3.3	58.0	.....	- 9 0 33.1
	β Arietis.....	39.5	43.0	0.0	35	58	41.2	.....	.....	.....	.....	+0	42.0	.....	.....	+20 1 34.9
	θ^1 Arietis.....	34.0	37.3	0.0	36	50	35.7	.....	43.9	29.39	46.0	+0	43.4	.....	.....	+19 9 39.0
	(b) Moon South L.....	55.2	58.9	0.0	37	51	57.1	- 9.2	.....	.....	.....	+0	45.0	.....	.....	+18 8 25.2
	(c) Moon North L.....	36.5	40.1	0.0	37	17	38.3	+11.4	.....	.....	.....	+0	44.1	.....	.....	+18 42 24.3
	γ Ceti.....	1.0	4.9	+0.1	53	26	3.1	.....	.....	.....	.....	+1	17.9	.....	.....	+ 2 33 37.1
	ϵ Arietis.....	17.4	21.9	0.0	35	18	19.6	.....	.....	.....	.....	+0	41.0	.....	.....	+20 41 57.5
	δ Arietis.....	0.0	4.6	0.0	36	53	2.3	.....	43.8	29.42	45.8	+0	43.5	.....	.....	+19 7 12.3
α Coronæ borealis.....	1.4	6.9	-0.1	28	45	4.1	.....	45.5	.....	.....	+0	31.9	58.1	57.5	+27 15 21.5	
α Serpentis.....	51.0	55.3	+0.1	49	3	53.2	.....	.....	.....	.....	+1	6.9	58.1	.....	+ 5 55 57.4	
Nov. 20	Sun South L.....	8.3	13.0	+0.1	75	51	10.8	.....	45.7	29.60	46.5	+3	45.9	.....	..	-19 53 59.2
	(d) ζ Ursæ Minoris.....	26.0	29.1	-0.3	337	44	27.2	+ 0.1	.....	.....	.....	-0	23.9	57.5	.....	+78 16 54.1
	(e) Mercury Centre.....	20.2	23.9	+0.1	81	6	22.2	- 1.0	46.8	29.59	47.2	+5	53.1	.....	.....	-25 11 16.8
	δ Ursæ Minoris.....	55.5	61.2	-0.1	329	25	58.3	.....	44.5	29.56	46.0	-0	34.5	56.8	.....	+86 35 33.7
	λ Ursæ Minoris.....	36.1	41.5	0.0	327	11	38.8	.....	43.5	29.53	45.4	-0	37.7	56.5	.....	+88 49 56.4
	α Ursæ Minoris.....	54.4	60.1	-0.1	327	33	57.1	.....	42.2	29.40	44.8	-0	37.1	58.1	.....	+88 27 37.5
Nov. 21	(f) α Ursæ Minoris.....	54.5	59.5	-0.1	327	33	56.9	+ 0.6	42.2	29.60	44.9	-0	37.3	58.6	58.4	+88 27 38.2
	γ Ceti.....	59.9	64.4	+0.1	53	26	2.3	.....	43.0	29.62	44.9	+1	18.6	.....	.....	+ 2 33 37.5
	(a) α Ceti.....	1.5	5.7	+0.1	52	32	3.7	- 0.2	.....	.....	.....	+1	16.2	58.1	.....	+ 3 27 38.7
	α Persei.....	30.0	33.5	-0.5	6	43	31.2	.....	.....	.....	.....	+0	6.9	58.2	.....	+49 17 20.3
	η Tauri.....	50.2	54.8	-0.1	32	23	52.4	.....	42.0	29.64	44.7	+0	37.2	58.4	.....	+23 36 28.8
	37 Tauri.....	44.6	47.5	0.0	34	21	46.1	.....	.....	.....	.....	+0	40.1	.....	.....	+21 38 32.2
	ν^1 Tauri.....	25.3	29.1	-0.1	33	23	27.1	.....	.....	.....	.....	+0	38.7	.....	.....	+22 36 52.6
	Moon North L.....	18.8	22.7	-0.1	28	55	20.7	.....	41.0	29.65	44.4	+0	32.4	.....	.....	+27 5 5.3
Nov. 22	(e) α Herculis.....	26.0	30.0	0.0	41	25	28.0	- 0.1	43.0	29.84	45.0	+0	51.9	57.1	57.1	+14 34 37.3
	α Ophiuchi.....	9.1	12.5	0.0	43	19	10.8	.....	.....	.....	.....	+0	55.5	58.2	.....	+12 40 50.8
<div style="display: flex; justify-content: space-between; padding: 10px;"><div>(a) At Wire IV. (b) At 2^h 26^m 51^s. (c) At 2^h 28^m 25^s: not fully</div><div>enlightened; correction for defect of illumination 0^u.4. (d) At 15^h 51^m 0^s.</div><div>(e) At Wire V. (f) At 1^h 6^m 40^s.</div></div>																

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
Nov. 22	γ Draconis	13.1	18.0	-0.5	4 30 15.1	.....	.....	.....	.....	+0 4.6	58.0	57.1	+51 30 37.4
	δ Ursæ Minoris	56.3	62.0	-0.1	329 25 59.1	.....	43.2	29.87	45.0	-0 34.9	56.8	.....	+86 35 32.9
	λ Ursæ Minoris	36.0	40.8	0.0	327 11 38.4	.....	43.0	29.88	44.9	-0 38.2	55.4	.....	+88 49 56.9
	α Ursæ Minoris	53.1	59.2	-0.1	327 33 56.0	.....	41.9	29.92	44.0	-0 37.8	56.9	.....	+88 27 38.9
Nov. 23	(a) Sun North L.	16.8	20.9	+0.1	75 58 18.9	- 1.0	42.9	29.74	44.2	+3 50.3	.....	57.6	-20 1 10.6
	ε Ursæ Minoris	4.8	9.9	-0.2	333 44 7.1	.....	.....	.....	.....	-0 29.0	57.8	.....	+82 17 19.5
	α Herculis	26.7	30.9	0.0	41 25 28.8	.....	44.3	29.72	44.9	+0 51.5	57.4	.....	+14 34 37.3
	α Ophiuchi	8.9	12.9	0.0	43 19 10.9	.....	.....	.....	.....	+0 55.1	57.7	.....	+12 40 51.6
Nov. 26	α Lyrae	19.1	22.3	-0.3	17 22 20.4	.....	34.9	28.98	40.5	+0 18.2	58.6	57.9	+38 38 19.3
	λ Ursæ Minoris	37.4	41.3	0.0	327 11 39.4	.....	34.7	29.00	39.9	-0 37.7	56.7	.....	+88 49 56.2
	α Cygni	55.1	59.0	-0.4	11 17 56.6	.....	.....	.....	.....	+0 11.6	58.3	.....	+44 42 49.7
Nov. 27	Sun South L.	55.7	60.0	+0.1	77 17 57.9	.....	31.4	29.07	34.0	+4 15.0	.....	57.7	-21 21 15.2
	η Draconis	28.2	31.8	-0.6	354 8 29.4	.....	.....	.....	.....	-0 6.1	57.4	.....	+61 52 34.4
	γ Draconis	14.9	19.0	-0.5	4 30 16.5	.....	.....	.....	.....	+0 4.6	57.9	.....	+51 30 36.6
	α Lyrae	18.7	21.0	-0.3	17 22 19.6	.....	33.0	29.07	35.0	+0 18.3	57.7	.....	+38 38 19.8
Nov. 28	α^2 Capricorni	41.0	42.8	+0.1	69 0 42.0	.....	32.8	29.24	38.0	+2 32.5	59.2	58.4	-13 2 16.1
	α Cygni	56.0	59.3	-0.4	11 17 57.2	.....	.....	.....	.....	+0 11.8	58.8	.....	+44 42 49.4
	(b) λ Ursæ Minoris	27.0	30.0	0.0	327 11 28.5	+12.6	.....	.....	.....	-0 38.2	57.7	.....	+88 49 55.5
	ζ Cygni	55.0	57.9	-0.2	26 25 56.3	.....	32.3	29.27	37.6	+0 29.4	57.7	.....	+29 34 32.7
Nov. 30	(c) λ Ursæ Minoris	57.3	62.0	0.0	327 10 59.7	+40.1	41.0	29.15	41.8	-0 37.4	56.9	57.4	+88 49 55.0
	(d) α Arietis	55.7	59.5	-0.1	33 17 57.5	+ 0.3	41.0	29.30	42.0	+0 38.1	57.2	.....	+22 42 21.5
	(e) α Persei	28.4	31.5	-0.5	6 43 29.4	0.0	40.1	.....	.....	+0 6.8	58.1	.....	+49 17 21.2
	(f) η Tauri	49.7	53.5	-0.1	32 23 51.5	+ 0.2	40.0	29.30	41.9	+0 36.9	57.6	.....	+23 36 28.8
Dec. 6	Sun North L.	35.5	35.2	+0.1	78 8 35.4	.....	34.6	29.95	38.6	+4 39.1	.....	58.1	-22 12 16.4
	(a) α Aquilæ	53.0	55.9	+0.1	47 32 54.5	- 0.2	37.5	29.94	39.0	+1 5.3	58.6	.....	+ 8 26 58.5
	α Cygni	57.0	60.4	-0.4	11 17 58.3	.....	36.9	29.93	39.0	+0 11.9	58.8	.....	+44 42 47.9
	(g) λ Ursæ Minoris	22.0	26.0	0.0	327 11 24.0	+17.7	.....	.....	.....	-0 38.7	56.7	.....	+88 49 55.1
Dec. 7	ζ Cygni	56.8	59.0	-0.2	26 25 57.7	.....	37.0	29.93	39.0	+0 29.7	58.4	.....	+29 34 30.7
	Sun South L.	56.8	60.8	+0.1	78 47 58.9	.....	37.4	29.85	39.0	+4 52.1	.....	59.1	-22 51 51.9
Dec. 12	(e) γ Draconis	19.0	23.2	-0.5	4 30 20.6	+ 0.1	.....	.....	.....	+0 4.7	59.1	.....	.....
	(h) δ Ursæ Minoris	59.4	64.8	-0.1	329 26 2.0	+ 1.9	42.4	28.95	41.8	-0 33.9	57.0	57.0	.....
Dec. 16	(c) α Cygni	57.4	61.0	-0.4	11 17 58.8	0.0	40.0	29.57	41.8	+0 11.7	57.3	57.1	+44 42 46.6
	(e) ζ Cygni	57.0	60.7	-0.2	26 25 58.7	- 0.1	.....	.....	.....	+0 29.2	57.3	.....	+29 34 29.3
	α Cephei	17.5	21.2	-0.6	354 6 18.8	.....	39.4	29.58	41.8	-0 6.2	56.8	.....	+61 54 44.5
Dec. 17	α Aquarii	6.4	10.5	+0.1	57 5 8.6	.....	37.0	29.56	39.8	+1 31.0	57.3	57.8	- 1 5 41.8
	ζ Pegasi	0.7	4.2	+0.1	46 0 2.6	.....	37.0	29.54	39.8	+1 1.1	58.4	.....	+ 9 59 54.1
Dec. 20	(i) δ Ursæ Minoris S. P.	9.4	14.7	+0.1	322 37 12.2	- 7.2	.....	.....	.....	-0 42.9	57.7	57.7	+86 35 24.4
	(k) 51 (Hev.) Cephei	35.2	40.8	-0.1	328 45 37.9	+ 3.4	.....	.....	.....	-0 34.1	57.7	.....	+87 15 50.5
	(l) Moon North L.	58.8	65.0	-0.1	28 21 1.8	+ 3.3	48.1	28.66	46.5	+0 30.2	.....	.....	+27 39 22.4
Dec. 21	Sun North L.	32.9	37.4	+0.1	79 7 35.2	.....	47.5	28.83	47.2	+4 43.9	.....	57.4	-23 11 21.7
	(m) δ Ursæ Minoris	3.0	9.4	-0.1	329 26 6.1	+ 0.2	.....	.....	.....	-0 33.4	57.1	.....	+86 35 24.5
	α Lyrae	25.0	28.8	-0.3	17 22 26.6	.....	.....	.....	.....	+0 17.6	57.3	.....	+38 38 13.2
	(n) β Lyrae	43.9	48.9	-0.2	22 49 46.2	0.0	47.8	.....	.....	+0 23.7	57.3	.....	+33 10 47.5
	(n) ζ Aquilæ	19.0	24.0	0.0	42 22 21.5	- 0.2	.....	.....	.....	+0 51.3	57.6	.....	+13 37 44.8
<div> <div>(a) At Wire V.</div> <div>(b) At 20^h 39^m 20^s.</div> <div>(c) At 20^h 53^m 15^s.</div> <div>(d) At 2^h 0^m 0^s.</div> </div> <div> <div>(e) At Wire IV.</div> <div>(f) At 3^h 39^m 40^s.</div> <div>(g) At 20^h 42^m 35^s.</div> </div> <div> <div>(h) At 18^h 20^m 30^s.</div> <div>(i) At 6^h 16^m 35^s.</div> <div>(k) At 6^h 18^m 52^s.</div> </div> <div> <div>(l) At 6^h 24^m 37^s.</div> <div>(m) At 18^h 22^m 55^s.</div> <div>(n) 30^s after transit.</div> </div>													

Date.	OBJECT OBSERVED.	Microscope.		Correc- tion.	Mean Reading of Circle.	Reduc- tion to Meri- dian.	Ext. Ther.	Bar.	Att. Ther.	Refraction.	Equatorial Point		Apparent Declination observed.
		I.	II.								observed.	adopted.	
Dec. 21	(a) τ Geminorum.....	21.1	25.0	-0.2	25 30 22.9	+ 0.1	46.8	28.96	47.0	+0 27.0	.....	57.4	+30 30 7.4
	(b) Moon South L.....	29.6	32.6	-0.1	31 13 31.0	+ 7.7	.....	.....	.....	+0 34.4	.....	.....	+24 46 44.3
	(c) Moon North L.....	37.7	41.1	-0.1	30 40 39.3	- 5.7	46.8	28.97	47.0	+0 33.6	.....	.....	+25 19 50.2
Dec. 22	β Draconis.....	41.3	46.4	-0.5	3 35 43.4	.....	44.5	28.86	45.3	+0 3.5	56.9	57.0	+52 25 10.1
	γ Draconis.....	23.9	27.9	-0.5	4 30 25.4	.....	.....	.....	.....	+0 4.4	58.0	.....	+51 30 27.2
Dec. 23	Sun South L.....	51.5	54.0	+0.1	79 39 52.8	.....	44.7	28.88	45.5	+5 0.5	.....	.....	-23 43 56.3
	δ Ursæ Minoris.....	2.9	9.0	-0.1	329 26 5.9	.....	.....	.....	.....	-0 33.7	55.7	.....	+86 35 24.8
	(d) α Lyræ.....	25.9	29.5	-0.3	17 22 27.4	0.0	.....	.....	.....	+0 17.7	57.6	.....	+38 38 11.9
Dec. 24	α Cephei.....	17.8	23.4	-0.6	354 6 20.0	.....	43.5	28.40	44.7	-0 5.8	56.9	57.8	+61 54 43.6
	\downarrow Arietis.....	25.9	30.0	0.0	39 0 28.0	.....	41.8	28.52	43.8	+0 45.7	.....	.....	+16 59 44.1
	A. S. C. 268.....	30.4	35.6	+0.1	49 52 32.8	.....	.....	.....	.....	+1 6.9	.....	.....	+ 6 7 18.1
	γ Ceti.....	4.9	9.5	+0.1	53 26 7.3	.....	.....	.....	.....	+1 16.0	.....	.....	+ 2 33 34.5
	α Ceti.....	6.1	10.3	+0.1	52 32 8.3	.....	.....	.....	.....	+1 13.6	58.8	.....	+ 3 27 35.9
	α Persei.....	24.0	27.3	-0.5	6 43 25.1	.....	40.8	28.53	42.5	+0 6.6	57.6	.....	+49 17 26.1
	γ Draconis.....	23.7	27.5	-0.5	4 30 25.1	.....	42.0	.....	.....	+0 4.4	57.0	56.6	+51 30 27.1
Dec. 25	Sun North L.....	33.7	36.9	+0.1	79 5 35.4	.....	41.6	28.74	42.9	+4 45.9	.....	.....	-23 9 24.7
	δ Ursæ Minoris.....	4.1	9.9	-0.1	329 26 6.9	.....	.....	.....	.....	-0 33.8	56.0	.....	+86 35 23.5
	α Lyræ.....	25.9	29.0	-0.3	17 22 27.2	.....	.....	.....	.....	+0 17.8	56.9	.....	+38 38 11.6
	α Aquilæ.....	56.0	59.0	+0.1	47 32 57.6	.....	40.2	28.78	43.0	+1 2.4	56.3	.....	+ 8 26 56.6
Dec. 26	Sun South L.....	3.6	7.5	+0.1	79 36 5.7	.....	34.5	29.22	38.5	+5 9.1	.....	57.2	-23 40 17.6
	α Lyræ.....	25.8	29.0	-0.3	17 22 27.1	.....	.....	.....	.....	+0 18.4	57.1	.....	+38 38 11.7
	α Cygni.....	59.0	63.9	-0.4	11 18 1.0	.....	35.0	29.18	37.7	+0 11.7	57.2	.....	+44 42 44.5
	ζ Pegasi.....	0.8	4.0	+0.1	46 0 2.5	.....	33.0	29.14	37.7	+1 0.8	57.2	.....	+ 9 59 53.9
Dec. 27	β Pegasi.....	17.0	22.0	-0.1	28 47 19.4	.....	.....	.....	.....	+0 32.3	58.5	58.5	.....
	Uranus.....	44.0	44.3	+0.1	63 21 44.3	.....	32.2	29.10	34.4	+1 56.7	.....	.....	- 7 22 42.5
	21 Virginis.....	59.5	63.0	+0.1	64 33 1.3	.....	32.0	29.17	35.2	+2 3.2	.....	58.6	- 8 34 5.9
	(e) Moon South L.....	41.4	44.8	+0.1	64 28 43.2	-14.1	.....	.....	.....	+2 2.9	.....	.....	- 8 29 33.4
	12 Canum Venat.	54.5	56.5	-0.3	16 49 55.2	.....	.....	.....	.....	+0 17.8	57.5	.....	+39 10 45.6
Dec. 28	Sun North L.....	2.0	4.0	+0.1	78 59 3.1	.....	32.0	29.30	34.0	+4 54.9	.....	.....	-23 2 59.4
	α Lyræ.....	29.0	30.2	-0.3	17 22 29.3	.....	.....	.....	.....	+0 18.5	58.8	.....	+38 38 10.8
	(d) β Lyræ.....	47.8	50.7	-0.2	22 49 49.0	- 0.1	.....	.....	.....	+0 24.9	59.2	.....	+33 10 44.8
	α Aquilæ.....	56.7	60.2	+0.1	47 32 58.5	.....	33.4	29.32	34.9	+1 4.6	58.9	.....	+ 8 26 55.5
	(a) Uranus.....	4.6	5.0	+0.1	63 21 4.9	- 0.4	33.0	29.38	35.0	+1 57.5	.....	.....	- 7 22 3.4
	12 Canum Venat.	55.1	57.4	-0.3	16 49 55.9	.....	31.0	29.73	34.2	+0 18.2	58.4	58.8	+39 10 44.7
	α Ursæ Minoris S. P.	25.8	29.0	-0.1	324 29 27.3	.....	.....	.....	.....	-0 43.2	57.4	.....	+88 27 45.3
	(f) Moon South L.....	9.4	12.0	+0.1	69 58 10.8	+10.6	.....	.....	.....	+2 43.6	.....	.....	-14 0 6.2
	(g) η Ursæ Majoris.....	30.1	31.2	+0.1	69 58 30.7	- 9.3	.....	.....	.....	+2 43.6	.....	.....	-14 0 6.2
	η Bootis.....	21.5	24.3	-0.5	5 54 22.4	.....	.....	.....	.....	+0 6.2	58.6	.....	+50 6 30.2
	η Bootis.....	17.0	19.7	0.0	36 48 18.3	.....	31.8	29.76	33.5	+0 45.0	60.7	.....	+19 11 55.5
Dec. 29	α Ursæ Minoris S. P.	26.0	29.9	-0.1	324 29 27.8	.....	31.1	29.96	35.6	-0 43.5	57.5	58.8	+88 27 45.5
	ζ Ursæ Majoris.....	32.2	35.0	-0.5	0 15 33.1	.....	.....	.....	.....	+0 0.2	57.0	.....	+55 45 25.5
	η Ursæ Majoris.....	22.0	25.0	-0.5	5 54 23.0	.....	.....	.....	.....	+0 6.2	59.0	.....	+50 6 29.6
	η Bootis.....	18.3	20.0	0.0	36 48 19.1	.....	.....	.....	.....	+0 45.4	61.6	.....	+19 11 54.3
Dec. 31	(h) β Pegasi.....	18.8	22.1	-0.1	28 47 20.4	0.0	.....	.....	.....	+0 31.5	58.2	58.5	+27 13 6.6
	Uranus.....	49.9	50.8	+0.1	63 18 50.4	.....	41.8	28.99	41.9	+1 53.5	.....	.....	- 7 19 45.4
	α Ceti.....	6.9	11.0	+0.1	52 32 9.1	.....	41.5	28.96	42.0	+1 14.7	59.3	.....	+ 3 27 34.7
	η Tauri.....	49.7	53.7	-0.1	32 23 51.6	.....	41.2	28.96	42.0	+0 36.4	57.9	.....	+23 36 30.5

(a) At Wire V.
(b) At 7^h 32^m 30^s.
(c) At 7^h 34^m 6^s.: not fully

enlightened; correction
for defect of illumination
0".1.

(d) At Wire IV.
(e) At 12^h 42^m 15^s.
(f) At 13^h 25^m 18^s.

(g) At 13^h 26^m 48^s.
(h) 12^s after transit.

ELEMENTS
FOR
REDUCING THE OBSERVATIONS
MADE WITH
THE MURAL CIRCLE;
AND
MEAN DECLINATIONS OF THE STARS OBSERVED,
FOR JANUARY 1, 1839.

MEAN VALUE OF THE RUNS OF THE MICROSCOPES.

PERIOD.		Mean Value of Runs.
Beginning	Ending	
1839, January 1	1839, February 26	" 300.28
February 27	March 6	300.26
March 12	25	299.86
26	July 21	300.16
July 24	October 29	300.28
October 30	December 31	299.96

CORRECTION OF THE CIRCLE-CLOCK.

Date.	Time by Circle-Clock.	Correction.	Date.	Time by Circle-Clock.	Correction.	Date.	Time by Circle-Clock.	Correction.
1839, Jan. 1	h. m. 19 22	s. - 11.6	1839, Feb. 22	h. m. 22 58	s. - 61.9	1839, April 9	h. m. 2 52	s. - 40.6
2	19 7	12.3		22 59 (a)	1.9	10	2 5	45.4
3	20 39	13.7	23	22 50	3.6	11	1 54	50.4
4	21 32	14.6	25	23 47	7.0	12	1 44	55.1
7	20 58	20.3	26	23 43	8.9	13	1 38	- 58.6
9	19 31	26.3	27	10 52	11.5		1 39 (a)	+ 1.4
10	19 36	30.4	28	23 10	12.8		9 3	- 0.5
11	20 28	32.7				15	7 30	7.5
14	20 26	36.4	March 1	22 58	14.2	17	10 52	16.0
15	21 0	38.8	4	23 45	16.8	18	2 1	19.0
17	20 28	45.1	5	2 47	18.2		5 50	19.9
18	21 17	49.6	8	1 25	25.5	19	2 11	24.0
20	0 31	57.2	11	23 47	37.0	20	2 39	29.1
21	20 56	59.6	12	0 23	40.8	21	2 57	34.1
22	21 18	62.7	13	3 24	45.2		9 26	35.1
23	21 54	66.4	15	0 36	51.1	23	2 30	42.4
	21 55 (a)	6.4	16	0 39	52.7	24	2 47	45.7
24	23 33	9.3	18	0 2	54.3	25	3 4	49.2
26	20 45	13.4	20	0 54	57.9	26	2 51	52.8
28	20 54	18.3	21	1 41	59.2	27	2 48	56.2
29	21 35	21.5	22	2 2	60.7	28	4 8	60.3
				2 3 (a)	0.7	29	3 11	64.1
Feb. 1	21 13	33.6	23	1 29	2.1		3 12 (a)	4.1
2	22 4	37.2	24	8 27	3.8	30	3 27	7.4
4	23 44	41.9	25	0 43	4.8			
5	22 19	43.4	26	1 26	5.9	May 1	6 17	9.7
6	21 39	44.9	28	1 44	7.3	2	2 47	12.7
7	21 52	45.7	29	1 17	7.9	3	2 59	16.7
8	22 37	46.8	30	1 46	9.6	4	3 22	20.7
9	21 58	46.7		9 26	10.1	6	3 28	27.7
11	22 34	47.0				9	4 5	39.1
12	22 44	47.0	April 1	1 21	13.2	10	3 26	43.4
16	1 47	49.5	3	0 56	18.2	11	5 12	48.4
18	22 16	52.0	4	2 25	21.5	13	3 37	58.9
19	22 18	53.8	5	1 17	24.7	14	5 49	66.1
20	23 21	56.4	8	1 22	36.2		5 50 (a)	6.1

(a) Clock put back one minute.

Date.	Time by Circle-Clock.	Correction.	Date.	Time by Circle-Clock.	Correction.	Date.	Time by Circle-Clock.	Correction.
1839, May 15	<i>h. m.</i> 4 40	<i>s.</i> - 12.7	1839, July 16	<i>h. m.</i> 8 10 (a)	<i>s.</i> - 0.6	1839, Oct. 28	<i>h. m.</i> 14 36	<i>s.</i> - 32.0
16	4 21	19.9	17	9 7	8.1	29	15 15	33.1
17	3 59	26.3	18	8 12	14.5	30	15 2	34.0
18	4 44	32.1	19	8 0	20.8	31	15 21	34.4
20	4 6	40.6	20	8 36	27.0			
22	4 13	47.0	22	8 46	37.0	Nov. 1	14 58	35.3
24	8 7	54.8	23	8 48	42.2	2	14 55	36.2
27	9 0	70.1	24	8 30	46.3	4	16 4	35.8
28	16 26	77.1	25	8 31	51.2	5	15 48	35.2
30	8 17	87.1	26	8 32	55.2	6	15 50	35.3
	8 18 (a)	27.1	27	12 0	- 59.8	7	15 1	35.0
31	6 56	34.4		12 1 (a)	+ 0.2	8	15 56	34.7
			29	8 54	- 7.4	9	17 42	34.0
June 1	6 2	41.2	30	8 47	11.5	11	15 42	33.0
3	6 0	55.1	31	9 19	15.4	12	15 50	32.4
4	6 57	62.4				13	15 37	32.2
	6 58 (a)	2.4	Aug. 1	8 58	19.7	14	16 9	32.0
5	5 9	8.6	9	11 28	57.1	15	15 56	31.8
6	5 19	14.3				16	16 3	31.3
7	6 31	20.1	Sept. 13	12 20 (b)	8.9	17	0 9	31.8
8	5 17	25.5	14	12 0	13.0	18	17 7	32.2
10	5 24	36.8	16	12 34	20.2	19	17 29	32.7
11	6 9	43.2	17	13 42	22.7	20	16 43	33.5
12	6 6	48.7	18	12 10	24.6	21	16 41	34.5
13	6 18	54.7	19	12 8	27.0		4 20	35.3
14	6 5	60.8	20	12 20	29.7	22	16 33	35.3
	6 6 (a)	0.8	21	12 24	32.1	23	16 23	35.3
15	6 56	7.1	22	23 23	35.7	25	16 6	34.3
16	9 52	11.8	23	12 18	37.3	26	18 14	33.8
17	6 14	16.7	24	12 29	40.4	27	16 46	33.9
18	6 30	22.7	25	13 18	42.4	28	17 17	35.9
19	6 45	28.7	27	12 47	48.7	29	18 1	37.9
20	6 53	34.9	28	15 59	51.7	30	16 53	39.4
22	7 9	47.4						
24	7 48	59.4	Oct. 1	14 19	59.6	Dec. 2	17 24	40.8
25	6 39	64.1	2	14 45	62.1	4	18 46	42.6
	6 40 (a)	4.1		14 46 (a)	2.1	5	17 2	43.3
26	9 16	9.3	3	13 1	5.0	6	17 37	44.2
27	7 22	13.5	4	12 55	7.9	7	17 38	45.0
28	7 0	18.2	5	12 58	10.9	9	18 48	46.6
29	14 27	24.7	7	13 19	16.7	10	19 2	47.7
			8	13 46	19.7	11	17 41	48.6
July 1	7 13	33.5	9	14 18	21.7	12	17 24	49.6
2	7 3	38.8	10	14 53	23.4	13	17 33	50.1
3	7 24	43.8	11	13 45	24.4	14	18 34	50.3
4	7 35	48.6	12	13 54	24.9	16	18 18	49.1
5	7 51	53.9	14	13 45	24.8	18	18 8	47.9
6	7 58	- 59.9	16	14 48	27.0	20	18 24	46.4
	7 59 (a)	+ 0.1	17	21 33	28.8	21	18 2	45.3
8	7 14	- 11.5	18	13 47	29.8	23	18 43	41.4
9	7 34	17.2	19	13 40	31.1	25	20 25	38.3
10	9 2	23.1	21	14 13	33.0	27	19 0	36.9
11	7 22	28.9	23	14 4	33.1	28	19 21	38.2
13	7 55	40.6	24	15 12	32.3	30	23 13	39.9
15	8 20	53.8	25	15 22	31.6	31	19 59	40.8
16	8 9	60.6	26	15 25	31.3			

(a) Clock put back one minute.

(b) Clock put back three minutes.

MEAN DECLINATIONS OF THE STARS OBSERVED IN THE YEAR 1839, REDUCED TO
JANUARY 1, 1839.

α Andromedæ.			α Cassiopeæ.			α Ursæ Minoris.			α Ursæ Minoris S.P.			η Piscium.		
Jan. 20	+28	12 5.2	Mar. 19	+55	39 12.7	Jan. 21	+88	27 2.8	April 10	+88	27 4.6	Sept. 23	+14	30 48.1
Feb. 1		3.9	25		11.9	28		3.0	13		3.9	β Arietis.		
27		4.5	Oct. 20		11.8	Feb. 1		3.2	17		2.4	Nov. 19 +20 1 6.0		
Mar. 4		3.8				6		3.9				α Arietis.		
19		5.3	26		12.1	13		2.8	18		2.1	Feb. 13 +22 41 52.3		
Sept. 22		5.1	Nov. 9		11.4	23		4.0	20		2.8	18		52.5
24		4.8	19		11.6	25		3.0	23		3.5	23		53.7
Oct. 12		4.8	β Ceti.			27		2.6	24		3.4	25		53.0
20		4.3	Jan. 17	-18	52 14.9	Mar. 2		3.0	26		2.3	Mar. 2		52.8
Nov. 9		4.5	Nov. 17		17.4	4		2.1	27		2.0	22		51.7
16		4.5	19		15.5	19		2.4	30		2.1	25		51.9
17		4.9	57 Piscium.			22		3.1	May 2		4.2	30		52.0
22 Andromedæ.			Jan. 26 +14 35 46.8			23		3.2	6		3.5	Nov. 30		52.2
Jan. 25	+45	10 34.8	Groombridge 144 S.P.			25		4.0	9		2.2	θ^1 Arietis.		
γ Pegasi.			Mar. 21	+88	9 22.3	28		2.9	11		2.0	Nov. 19 +19 9 11.0		
Jan. 20	+14	17 17.9	23		22.4	30		3.0	13		3.0	\downarrow Arietis.		
25		18.1	25		21.6	April 7		3.0	16		2.0	Dec. 24 +16 59 16.9		
Sept. 24		17.9	29		21.8	10		2.5	20		3.1	A. S. C. 268.		
Nov. 5		18.2	30		23.3	24		3.0	21		2.1	Dec. 24 + 6 6 54.2		
17		17.5	A. S. C. 91 S.P.			Oct. 2		2.6	23		1.9	γ Ceti.		
19		18.1	Mar. 21	+85	23 22.7	28		2.6	29		2.7	Feb. 18 + 2 33 11.7		
41 Piscium.			23		22.1	Oct. 2		3.6	31		2.0	Nov. 19 +20 41 31.4		
Sept. 22	+ 7	17 45.9	25		22.5	4		2.5	June 1		2.5	α Ceti.		
Nov. 16		44.0	29		23.2	5		3.1	12		3.9	Feb. 18 + 3 27 13.3		
17		43.7	30		24.4	8		3.4	19		2.4			
47 Piscium.			Groombridge 195 S.P.			12		2.8	July 30		2.5			
Jan. 17	+17	0 1.6	Mar. 21	+86	17 2.1	15		2.3	Sept. 13		2.5			
21		1.4	25		1.5	17		2.5	23		2.7			
26		1.4	29		1.7	19		3.4	24		3.2			
π Andromedæ.			April 8		3.6	20		2.6	26		2.6			
Jan. 17	+32	49 56.1	17		0.1	Nov. 5		2.7	Oct. 2		2.2			
26		56.1	ε Piscium.			9		2.7	3		2.5			
α Cassiopeæ.			Sept. 23	+ 7	1 18.1	16		3.5	5		2.0			
Jan. 17	+55	39 12.3	Nov. 17		17.7	17		4.0	9		2.2			
Feb. 6		12.4	\downarrow^3 Piscium.			19		2.9	10		2.4			
			Jan. 21	+18	47 52.7	21		3.7	16		1.9			
						23		2.7	17		2.7			
						25		2.9	18		2.1			
						29		4.0	20		2.6			
						30		3.4	24		2.7			
						April 8		3.1	27		2.7			
						α Ursæ Minoris S.P.			28		1.2			
						Mar. 18	+88	27 2.7	28		1.6			
						21		3.7	29		1.7			
						23		2.7	θ^1 Ceti.					
						25		2.9	Nov. 17	- 9	0 57.2			
						29		4.0	19		56.5			

α Ceti.		Piazzi III. 165 (Pleiad.)		ξ Eridani.		10 Orionis.		β Tauri.	
Feb. 23	+ 3 27 15.0	Jan. 14	+23 21 13.1	Jan. 17	- 4 7 22.6	Jan. 21	+ 1 27 40.2	Jan. 28	+28 27 50.8
Mar. 4	14.6	17	12.4	21	22.9	24	39.9	29	52.1
Nov. 21	14.2	21	12.4					Feb. 5	51.2
Dec. 24	13.8							22	51.6
31	13.1	Groombridge 750.		ν^1 Tauri.		ι Tauri.		April 13	52.6
δ Arietis.		Jan. 14	+85 6 58.1	Nov. 21	+22 36 33.0	Jan. 24	+21 21 12.9	23	51.5
Nov. 19	+19 6 47.0	15	58.5	46 Eridani.		16 Orionis.		May 10	51.6
α Persei.		Groombridge 750 S.P.		Jan. 15	- 7 4 54.7	Jan. 21	+ 9 36 57.5	γ Orionis.	
Jan. 10	+49 16 54.9	May 13	+85 6 61.7	17	53.7	28	58.1	Jan. 10	+ 6 11 52.4
Mar. 22	55.2	14	58.4	A. S. C. 526.		29	57.9	14	51.6
29	55.6	16	59.7	Jan. 21	- 7 10 40.8	α Aurigæ.		15	50.0
Nov. 21	55.0	22	60.5			Jan. 14	+45 49 32.2	17	50.1
30	54.1	27	58.6	α Tauri.		21	32.9	21	52.4
Dec. 24	55.0	γ^1 Eridani.		Jan. 10	+16 10 46.4	23	33.8	29	52.3
Groombridge 642 S.P.		Jan. 24	-13 58 16.8	14	47.2	28	33.4	δ Orionis.	
May 13	+86 7 13.5	35 Eridani.		23	46.3	April 13	33.8	Feb. 5	- 0 25 27.4
16	12.9	Jan. 14	- 2 0 20.4	24	47.2	May 10	33.2	22	27.4
22	13.3	15	20.5	April 13	45.7	27	33.5	April 18	28.1
27	13.0	17	20.4	23	46.8	28	34.3	α Leporis.	
June 1	13.8	37 Tauri.		24	46.1	29	33.2	Jan. 14	-17 56 33.5
ϵ Eridani.		Jan. 24	+21 38 11.4	May 10	45.5	β Orionis.		15	34.4
Jan. 24	-10 0 25.7	Nov. 21	10.6	June 12	46.6	Jan. 14	- 8 23 34.9	17	33.6
* Pleiad. R.A. 3 ^h 37 ^m 46 ^s .		37 Eridani.		14	47.5	28	34.8	21	33.4
Jan. 14	+23 13 19.8	Jan. 15	- 7 20 59.4	μ Eridani.		29	34.4	28	32.4
15	17.6	17	58.7	Jan. 14	- 3 33 18.7	Feb. 1	34.5	ϵ Orionis.	
17	20.3	45 Tauri.		15	19.6	Groombridge 944.		Feb. 5	- 1 18 37.9
η Tauri.		Jan. 21	+ 5 5 54.3	17	19.5	Jan. 14	+85 5 19.8	22	37.6
Jan. 24	+23 36 6.1	24	56.2	A. S. C. 552.		Groombridge 944 S.P.		April 18	38.1
Mar. 22	5.5	66 Tauri.		Jan. 21	+66 3 29.7	June 29	+85 5 21.0	* R. A. 5 ^h 31 ^m 55 ^s .	
Nov. 21	5.8	Jan. 14	+ 9 4 49.0	24	30.2	July 1	20.7	Jan. 2	+27 40 51.9
30	5.4	15	48.2	28	29.6	3	19.8	14	51.7
Dec. 31	6.4			10 Camelopardi.		4	20.1	15	51.2
26 Tauri (Pleiadum).				Jan. 14	+60 11 47.8	8	20.1	ζ Orionis.	
Jan. 15	+23 21 32.2	Jan. 14	+ 9 4 49.0	15	47.5	λ Leporis.		Jan. 17	- 2 2 0.6
21	33.1	15	48.2	17	48.7	Jan. 24	-13 20 53.8	21	0.3
24	32.1					28	53.2	23	0.8
								24	0.9

* R. A. 5 ^h 34 ^m 14 ^s .	α Aurigæ.	A. S. C. 816.	Groombridge 1119 S.P.	ε Canis Minoris.
Jan. 2 +27 39 2.0 14 2.2 15 2.6	Feb. 22 +29 32 60.9 23 59.9 Mar. 21 60.0 Sept. 29 59.8	Feb. 27 -17 57 6.1	July 9 +89 3 4.2 15 4.7	Mar. 2 +9 35 15.0 6 14.8
52 Orionis.	46 Aurigæ.	54 Aurigæ.	π ³ Canis Majoris.	α Geminorum following.
Jan. 28 +6 23 27.6 Feb. 5 28.0	Feb. 5 +49 21 40.5 25 40.4 27 39.5	Jan. 5 +28 23 53.6	Feb. 25 -19 56 9.3 26 10.8 27 9.2	Jan. 27 +32 14 2.7 Mar. 2 3.4 5 3.2 6 3.4 12 3.0 23 3.5
136 Tauri.	μ Geminorum.	26 Geminorum.	63 Aurigæ.	δ ² Canis Minoris.
Feb. 22 +27 34 1.0 Mar. 21 0.7	Jan. 1 +22 35 21.8 8 22.2 11 21.7 29 20.0 Feb. 6 20.7 23 19.9 Mar. 21 21.0 Sept. 29 20.6	Jan. 5 +17 47 47.3	Feb. 5 +39 34 32.1 23 31.4 24 33.0	Feb. 23 +3 37 40.3 24 39.9 25 39.2
α Orionis.	51 (Hevelii) Cephei.	ε Geminorum.	τ Geminorum.	δ ³ Canis Minoris.
Jan. 1 +7 22 13.9 11 15.2 29 14.0 Mar. 21 15.3 April 18 14.8 June 1 13.9 5 13.9	Jan. 1 +87 15 48.0 2 47.4 8 47.7 11 47.1 14 47.1 15 47.1 17 47.1 23 47.2 26 46.6 28 46.9 Feb. 7 47.1 Sept. 29 47.3 Dec. 20 47.2	Jan. 26 +25 16 59.7 27 60.2 Feb. 22 60.6 23 60.2 Sept. 29 61.6	Jan. 27 +30 30 6.3 Dec. 21 7.9	Feb. 26 +3 42 54.7 27 54.7 Mar. 2 55.4
β Aurigæ.	51 (Hev.) Cephei S.P.	ζ ² Geminorum.	20 Monocerotis.	25 Monocerotis.
Jan. 2 +44 55 19.8 14 19.9 15 20.1 17 21.2	July 9 +87 15 47.5 16 46.7 17 46.8 Oct. 18 47.9 19 46.5 28 47.1	Jan. 5 +13 3 48.7	Feb. 25 -3 59 28.9 26 29.0 27 27.4	Feb. 26 +3 42 54.7 27 54.7 Mar. 2 55.4
θ Aurigæ.	13 Monocerotis.	43 Camelopardi.	22 Monocerotis.	α Canis Minoris.
Jan. 21 +37 11 36.5 24 37.3 28 37.2	Jan. 29 +7 26 39.1 Feb. 5 40.5 23 39.9	A. S. C. 834.	Mar. 2 -0 13 55.4	Mar. 5 -3 45 25.0 6 23.7 12 27.1
ζ Leporis.	33 Geminorum.	Feb. 5 +77 9 55.5 23 55.2 25 54.6	δ Geminorum.	26 Monocerotis.
Jan. 29 -14 12 8.1 Feb. 5 8.2 23 6.9	Jan. 5 +16 22 46.2	α Canis Majoris.	Jan. 27 +22 16 18.8 29 17.8 Feb. 24 19.4 Mar. 2 20.2 Sept. 29 20.5	Jan. 27 +5 37 56.1 Feb. 24 56.3 26 56.1 Mar. 5 57.7 6 56.1 23 54.6 May 11 56.2 16 55.5 29 54.9 30 55.4 31 55.1 June 3 55.1 14 53.8 16 54.4
τ Leporis.	Groombridge 1119.	Jan. 27 -16 30 1.5 Feb. 26 2.6 April 24 1.8 May 6 4.5 Sept. 29 0.8	ι Geminorum.	26 Monocerotis.
Feb. 23 -19 9 4.5	Jan. 27 +89 3 1.2 28 3.8 Feb. 5 4.3 23 2.9	33 Geminorum.	Feb. 23 +28 6 40.4 24 40.9 Sept. 29 41.8	
A. S. C. 761.			1 Canis Minoris.	
Jan. 21 +69 21 47.8 28 48.1 Feb. 5 48.2			Feb. 5 +11 58 42.9 25 43.1 26 42.5	
			ε Canis Minoris.	
			Feb. 27 +9 35 14.9	

α Geminorum.		13 Argûs.		A. S. C. 1041.		ϵ Ursæ Majoris.		26 Hydræ.	
Jan. 27	+ 24 46 40.1	Mar. 6	+ 2 46 15.5	Feb. 24	- 19 2 14.0	Mar. 12	+ 48 40 7.8	Feb. 27	- 11 17 55.5
28	40.7			27	14.0	21	6.4	Mar. 2	56.0
β Geminorum.		29 Monocerotis.		Mar. 12	14.2	24	6.4	6	55.4
Feb. 23	+ 28 24 30.7	Feb. 23	- 2 31 11.5	π^2 Ursæ Majoris.		A. S. C. 1099.		27 Hydræ.	
24	31.4	24	10.5	Mar. 23	+ 64 52 56.8	Feb. 27	+ 47 47 16.8	Mar. 25	- 8 52 35.3
Mar. 5	30.2	27	11.8	25	56.4	Mar. 2	15.3	30	34.4
May 16	30.8	16 Argûs.		April 4	55.6	6	16.4	April 11	34.2
29	32.4			\ast R. A. 8 ^h 28 ^m 20 ^s .		A. S. C. 1103.		A. S. C. 1135.	
30	32.2	Mar. 2	- 18 46 39.9	Mar. 12	+ 20 17 20.1	Mar. 12	+ 39 5 27.2	Mar. 12	+ 82 1 38.9
31	30.7	5	38.9	23	18.5	21	25.3	21	38.3
June 3	32.9	23	40.0	γ Cancri.		23	26.2	23	38.9
14	32.4	Groombridge 1418.		Feb. 24	+ 22 2 31.9	ω Hydræ.		α Hydræ.	
16	29.8			25	33.1	Mar. 25	+ 5 43 52.2	Mar. 23	- 7 57 50.3
Sept. 29	32.6			δ Cancri.		ξ Cancri.		29	50.8
π Canis Minoris.		Mar. 6	+ 85 36 1.1	Jan. 29	+ 18 44 27.4	Jan. 29	+ 22 41 31.7	30	51.0
Feb. 23	+ 11 9 16.6	12	2.6	ϵ Cancri.		Mar. 24	32.0	April 4	51.5
24	17.0	21	3.0	Feb. 27	+ 29 20 31.8	25	31.5	8	50.7
25	16.6	23	2.3	Mar. 2	30.8	20 Hydræ.		11	50.9
4 Argûs.		25	1.7	12	31.2	Feb. 27	- 8 8 16.3	21	51.4
Feb. 26	- 14 10 39.8	λ Cancri.		ϵ Hydræ.		Mar. 2	18.1	May 19	51.3
27	37.4	Feb. 24	+ 24 31 25.0	Mar. 12	+ 7 0 17.3	6	16.3	θ Ursæ Majoris.	
Mar. 2	39.3	22 Argûs.		25	16.4	A. S. C. 1117.		Mar. 24	+ 52 24 23.3
6 Argûs.		Feb. 24	- 12 32 30.2	April 4	16.7	Mar. 12	+ 21 56 32.3	29	21.3
Mar. 5	- 16 49 23.0	Mar. 2	29.5	ϵ Hydræ.		21	30.4	30	23.3
23	22.2	6	28.8	Mar. 12	+ 7 0 17.3	23	31.1	April 4	24.3
14 Canis Minoris.		1 Hydræ.		April 4	16.7	18 Ursæ Majoris.		May 19	23.8
Feb. 23	+ 2 38 55.0	Mar. 25	- 3 14 2.8	12 Hydræ.		Mar. 25	+ 54 40 53.3	June 1	23.5
24	56.5	\circ Ursæ Majoris.		Mar. 21	- 12 57 47.9	30	51.9	8	25.0
25	55.6	Mar. 12	+ 61 14 56.3	23	47.1	λ Leonis.		Feb. 25	+ 23 40 25.1
28 Monocerotis.		23	55.1	25	46.9	Feb. 25	25.8	April 21	25.8
Feb. 26	- 0 57 3.0	θ Cancri.		A. S. C. 1075.		83 Cancri.		10 Leonis Minoris.	
27	3.4	Mar. 23	+ 18 38 0.3	April 4	- 1 18 41.8	Mar. 21	+ 18 23 0.2	Feb. 27	+ 37 6 29.5
Mar. 5	3.1					25	0.8	Mar. 2	27.6
6 Cancri.								6	30.5
Jan. 28	+ 28 14 21.5								
Mar. 23	23.3								

33 Hydræ.		♂ Leonis.		Groombridge 1620.		3 Hydræ & Crateris.		♂ Ursæ Majoris.	
Mar. 21	- 5 11 59.6	Mar. 25	+ 13 12 35.1	Mar. 12	+ 85 3 44.7	Mar. 25	- 16 26 58.5	Mar. 25	+ 45 22 15.5
23	57.8			21	45.4	29	59.8	29	14.4
29	59.6			23	46.5	April 8	57.6	30	14.7
♂ Hydræ.		A. S. C. 1199.		γ Leonis.		53 Leonis.		δ Leonis.	
Mar. 30	- 0 24 55.5	Feb. 27	- 12 31 23.0	Feb. 27	+ 20 39 10.0	Feb. 28	+ 11 23 43.1	Feb. 28	+ 21 24 17.8
April 8	55.3	Mar. 2	25.9	April 23	12.0			Mar. 18	16.7
10	55.1	21	25.1					April 17	17.0
♂ Leonis.		♂ Hydræ.		μ Ursæ Majoris.		α Hydræ & Crateris.		26	16.9
Feb. 25	+ 10 37 16.3	Mar. 25	- 12 17 11.9	Mar. 2	+ 42 18 23.6	Mar. 2	- 17 26 33.7	27	16.5
26	16.7	29	8.9	6	24.3	12	36.0	May 2	17.3
♂ Leonis.		30	11.5	12	24.2	25	34.1	6	18.5
		η Leonis.		30 Leonis Minoris.		β Ursæ Majoris.		7	16.6
April 21	+ 14 45 17.1	Mar. 25	+ 17 32 41.1	Mar. 21	+ 34 36 48.1	Mar. 29	+ 57 14 37.6	9	16.6
♂ Leonis.		α Leonis.		23	48.8	May 10	38.8	13	16.9
Mar. 30	+ 24 30 44.0	Feb. 27	+ 12 45 4.4		49.2	α Ursæ Majoris.		June 19	16.7
April 10	43.9	April 8	4.5	μ Hydræ.		May 6	+ 62 37 8.4	July 8	17.1
21	44.0	10	5.0	Mar. 29	- 16 0 59.7	7	6.8	Feb. 28	- 13 54 29.8
May 19	44.4	21	5.1	April 8	59.5	9	6.7	Mar. 18	28.9
June 3	43.8	26	5.3	17	59.9	June 19	7.1	April 17	28.5
16	45.7	June 5	4.5	37 Ursæ Majoris.		29	6.7	24	28.1
♂ Ursæ Majoris.		16	6.7			July 4	7.6	May 2	27.9
Feb. 27	+ 59 47 29.9	17	5.5	Mar. 2	+ 57 54 32.4	8	7.5	9	29.0
Mar. 2	29.1	19	4.3	6	32.6	10	6.6	13	28.7
6	28.6	July 4	5.6	12	33.5	15	6.5	♂ Leonis.	
♂ Ursæ Majoris.		8	4.0	1 Hydræ & Crateris.		30	6.5	Mar. 12	+ 6 54 39.3
Mar. 12	+ 54 48 47.0	15	4.6	Mar. 21	- 15 30 44.7	Sept. 12	6.6	18	37.8
21	44.7	17 Sextantis.		23	45.5	20	7.0	21	37.2
23	45.5	Feb. 27	- 7 37 10.7	25	45.3	22	7.9	♂ Leonis.	
22 Leonis.		Mar. 21	12.4	37 Leonis Minoris.		* R. A. 10 ^h 53 ^m 53 ^s .		April 8	+ 11 24 55.6
		25	12.5	Mar. 29	+ 32 48 37.3	April 8	+ 9 44 2.3	17	54.1
		λ ² Hydræ.		30	37.6	χ Leonis.		* R. A. 11 ^h 17 ^m 6 ^s .	
		Mar. 29	- 11 33 40.2	April 8	37.3	Feb. 27	+ 8 12 17.2	Mar. 25	+ 8 50 22.6
		30	39.8	42 Leonis Minoris.		Mar. 25	17.6	♂ Leonis.	
		April 8	38.8			29	17.7	April 24	+ 3 44 31.6
		Groombridge 1620.				67 Leonis.		♂ Leonis.	
Mar. 25	+ 25 9 11.9	Feb. 27	+ 85 3 46.7	Mar. 6	+ 31 31 40.9	Mar. 2	+ 25 31 43.4		
29	13.0	Mar. 2	46.2	12	40.7	12	44.3		
30	12.3			23	41.7	23	44.3		

* R. A. 11 ^h 21 ^m 13 ^s .		γ Ursæ Majoris.		12 Canum Venaticorum.		η Ursæ Majoris.		ϵ Bootis.	
Mar. 21	+ 8 29 11.9	Aug. 1	+ 54 35 23.6	April 30	+ 39 11 21.2	Sept. 21	+ 50 7 9.6	Oct. 2	+ 27 45 22.8
ν Leonis.		Sept. 13	23.5	July 30	21.3	25	9.7	28	23.0
		25	24.4	Sept. 13	21.0	Oct. 5	8.7	29	23.3
Feb. 28	+ 0 3 52.6	Groombridge 1850.		26	20.2	11	8.2	α^2 Libræ.	
* R. A. 11 ^h 29 ^m 2 ^s .				Oct. 2	21.0	15	9.9		
Mar. 12	+ 7 9 36.6	Mar. 18	+ 86 28 47.0	Dec. 27	22.4	17	9.4		
ν Virginis.		21	46.3	28	21.7	19	9.0		
		25	46.5	θ Virginis.		24	9.1	May 22	- 15 22 5.9
		29	44.9			27	8.0	June 29	4.3
		30	44.5	Mar. 29	- 4 40 39.3	28	8.9	β Ursæ Minoris.	
		ϕ Virginis.		May 23	39.1	29	8.4		
Feb. 27	+ 7 25 52.7	Mar. 29	+ 9 37 36.7	α Virginis.		η Bootis.		April 29	+ 74 48 48.7
28	52.2	April 24	37.8	Mar. 30	- 10 19 6.3	April 27	+ 19 12 27.0	May 22	48.9
Mar. 2	50.9	* R. A. 11 ^h 59 ^m 20 ^s .		April 10	5.6	May 23	26.3	June 10	49.7
β Leonis.		Feb. 27	+ 5 24 36.7	26	7.5	June 12	28.7	14	48.7
		η Virginis.		27	6.1	15	26.7	29	48.9
				30	8.7	Sept. 25	26.6	July 3	49.2
Feb. 27	+ 15 28 18.8			May 20	7.5	Oct. 2	25.8	Sept. 17	50.3
28	19.5			23	7.4	15	27.4	Oct. 11	48.2
Mar. 2	17.8			June 10	8.2	17	26.2	18	48.4
5	18.7			ζ Ursæ Majoris.		19	25.2	30	48.9
12	19.1			April 20	+ 55 46 4.4	28	26.5	31	48.6
				30	4.5	Dec. 28	26.2	Nov. 8	49.8
				May 20	5.2	29	25.3	10	49.1
				31	5.3	α Bootis.		11	48.8
				Oct. 3	4.0	Jan. 8	+ 20 1 24.5	β Libræ.	
				5	5.3	May 28	25.2	May 22	- 8 47 2.5
				16	5.2	June 6	25.7	June 29	3.3
				18	4.4	12	25.3	July 3	2.4
				24	3.8	14	25.9	A. S. C. 1752.	
				27	4.0	15	25.6	May 13	- 16 41 41.6
				Dec. 29	6.3	17	24.7	27	41.4
				Groombridge 2007.		17	23.8	α Coronæ borealis.	
				Mar. 21	+ 85 35 45.0	Sept. 17	23.4	May 27	+ 27 15 37.9
				25	45.9	21	23.6	June 17	38.0
				29	44.7	25	25.9	July 1	38.3
				April 18	46.3	Oct. 5	23.6	July 3	37.8
				26	45.9	18	24.2	Oct. 13	37.5
				η Ursæ Majoris.		21	24.4	Nov. 12	37.6
						29	24.3	19	37.5
						ϵ Bootis.		ϵ^2 Serpentis.	
						April 29	+ 27 45 22.2		
						May 28	21.6		
						June 14	23.0		
						29	21.9	May 16	+ 16 39 23.9

Groombridge 2283.			η Draconis.			* R. A. 17 ^h 16 ^m 3 ^s .			* R. A. 17 ^h 45 ^m 21 ^s .			δ Ursæ Minoris S.P.		
May 13	+ 87	50 4.8	June 10	+ 61	52 49.1	July 3	+ 32	8 41.9	July 3	+ 41	14 50.5	Jan. 14	+ 86	35 28.4
16		5.9	13		48.5	4		40.6	4		48.0	15		27.8
22		5.1	July 12		48.5	8		39.9	8		47.2	17		27.2
27		6.5	24		48.8	* R. A. 17 ^h 21 ^m 0 ^s .			* R. A. 17 ^h 50 ^m 4 ^s .			23		27.3
28		6.7	27		48.5	July 3	+ 34	50 5.7	July 3	+ 41	30 9.8	28		27.3
Groombridge 2283 S. P.			Oct. 4		48.1	4		4.3	4		8.5	Feb. 5		26.9
Jan. 14	+ 87	50 6.4	Nov. 16		48.3	8		5.5	8		9.2	6		26.4
α Serpentis.			27		48.9	* R. A. 17 ^h 23 ^m 43 ^s .			γ Draconis.			7		27.5
May 27	+ 6	56 11.9	* R. A. 16 ^h 42 ^m 40 ^s .			July 1	+ 15	39 42.6	July 2	+ 51	30 37.8	22		27.4
June 8		11.9	July 1		41.5	2		42.2	9		37.7	23		26.9
July 15		11.8	3		42.2	* R. A. 17 ^h 26 ^m 7 ^s .			12		37.6	25		27.7
Sept. 23		13.0	* R. A. 16 ^h 43 ^m 56 ^s .			July 3	+ 35	4 7.5	16		37.2	27		26.7
Oct. 13		12.7	July 1	+ 16	4 27.2	4		6.2	18		37.7	Mar. 21		25.5
Nov. 12		11.9	3		24.7	β Draconis.			δ Ursæ Minoris.			Sept. 29		28.4
19		11.6	4		23.1	July 3	+ 34	56 32.1	21		38.2	Dec. 20		27.5
ζ Ursæ Minoris.			ϵ Ursæ Minoris.			4		30.7	27		36.9	24 Ursæ Minoris.		
May 14	+ 78	17 11.6	July 4	+ 82	17 25.9	8		31.3	Dec. 22		36.8	July 9	+ 86	57 55.9
June 6		10.9	24		27.3	α Ophiuchi.			24		37.4	15		56.5
8		11.0	25		28.0	July 18	+ 12	40 57.0	α Lyrae.			16		57.0
July 1		12.7	29		27.4	Nov. 22		56.4	Jan. 1	+ 38	38 16.4	17		57.0
Oct. 13		11.6	Oct. 18		27.8	23		57.4	July 2		16.2	18		56.6
Nov. 20		11.6	25		28.0	δ Ursæ Minoris.			15		28.0	β Lyrae.		
θ Draconis.			Nov. 23		27.5	Jan. 1	+ 86	35 27.8	16		27.5	Jan. 1		16.3
July 8	+ 58	59 49.1	α Herculis.			July 2		27.3	17		27.3	11		16.2
Oct. 13		49.3	July 12	+ 14	34 44.9	9		28.0	18		27.1	July 2		16.2
δ Ophiuchi.			24		45.4	15		28.1	24		27.7	17		15.9
May 14	- 3	16 26.4	29		45.2	16		27.5	27		28.0	25		16.6
June 10		28.5	Nov. 22		44.7	17		27.3	Oct. 18		28.3	27		16.3
July 1		28.1	23		44.9	18		27.1	19		28.5	Aug. 1		17.2
Sept. 23		27.6	* R. A. 17 ^h 11 ^m 30 ^s .			20		27.7	28		28.8	Oct. 31		15.8
α Scorpii.			July 1	+ 28	54 37.4	* R. A. 17 ^h 28 ^m 1 ^s .			30		27.7	Nov. 13		16.2
July 21	- 26	4 3.3	3		36.4	July 3	+ 34	39 20.0	Nov. 20		27.8	26		15.4
η Draconis.			4		35.8	4		19.2	22		27.8	27		16.1
May 14	+ 61	52 48.2	4		25.6	* R. A. 17 ^h 15 ^m 30 ^s .			Dec. 21		27.8	Dec. 21		16.2
δ Ursæ Minoris S. P.			July 3	+ 32	1 26.2	July 3	+ 34	51 37.3	23		28.8	23		15.5
Jan. 1		27.2	4		24.7	4		35.7	25		28.1	25		15.8
2		28.2	8		25.6	8		36.6	28		27.4	26		16.2
8		27.3	* R. A. 17 ^h 29 ^m 0 ^s .			δ Ursæ Minoris S. P.			δ Ursæ Minoris S. P.			28		15.9
11		27.4	July 3	+ 32	1 26.2	Jan. 1	+ 86	35 27.2	Jan. 1		27.2	July 25	+ 33	10 48.0
			4		24.7	2		28.2	2		28.2	Oct. 31		48.4
			8		25.6	8		27.3	8		27.3	Nov. 13		48.2
						11		27.4	11		27.4	Dec. 21		48.8
												28		48.1

ζ Aquilæ.		λ Ursæ Minoris.		ζ Cygni.		δ Capricorni.		μ Pegasi.	
July 20	+13 37 44.8	Nov. 22	+88 49 34.7	Jan. 15	+29 34 11.7	Oct. 17	-16 51 15.5	Jan. 2	+23 45 10.6
Aug. 1	45.1	26	34.2	Feb. 1	11.7	18	14.7		
Dec. 21	45.9	28	33.7	Sept. 19	10.9				
				20	11.9				
δ Draconis.		30	33.5	Oct. 4	12.0	α Aquarii.		ι Cephei.	
		Dec. 6	34.4	Nov. 28	11.8	Jan. 3	-1 5 56.1	Jan. 15	+65 21 18.1
Jan. 1	+67 22 41.7	λ Ursæ Minoris S. P.		Dec. 6	10.8	May 6	56.0	21	17.7
				16	10.9	Sept. 24	56.8		
δ Aquilæ.		Feb. 23	+88 49 33.7	α Cephei.		28	57.9	λ Aquarii.	
		24	32.5	Jan. 9	+61 54 19.3	Oct. 7	57.6		
Sept. 17	+2 47 56.8	25	33.4	15	18.6	8	57.2	Oct. 19	-8 26 4.1
		26	32.6	21	17.9	10	57.7		
γ Aquilæ.		27	32.7	26	18.5	Dec. 17	56.5		
		α Delphini.		Sept. 20	18.9			α Piscis Australis.	
Sept. 18	+10 13 32.1	Jan. 9	+15 20 53.4	Oct. 4	18.8	ι Aquarii.		Oct. 15	-30 28 18.9
Nov. 11	32.2	α Cygni.		9	19.4	Oct. 17	-14 38 51.8	19	30.0
α Aquilæ.				Nov. 13	19.0	18	51.6	29	16.8
		Jan. 9	+44 42 29.0	Dec. 16	19.0	ζ Cephei.		β Pegasi.	
Jan. 8	+8 26 52.8	12	28.8	24	19.6	Jan. 3	+57 24 33.8	Jan. 2	+27 12 39.6
12	53.5	15	28.9	β Aquarii.		15	33.6	9	38.9
15	54.0	16	28.4	Oct. 8	-6 16 31.0			15	40.5
16	52.8	22	28.7	9	32.5	θ Aquarii.		21	39.1
Sept. 18	53.4			β Cephei.		Sept. 20	-8 34 55.8	Feb. 18	39.8
Nov. 11	52.9	23	28.4	Jan. 3	+69 51 16.5	21	54.7	25	39.3
Dec. 6	52.8	25	28.4	21	17.4	σ Aquarii.		26	39.7
25	53.6	Sept. 19	28.3	22	17.7	Sept. 20	-11 29 59.7	27	40.4
28	53.0	20	28.0	25	17.5	21	57.3	Oct. 20	41.7
α^2 Capricorni.		Nov. 26	28.7	26	17.6	58 Aquarii.		Nov. 5	38.0
		28	28.7	Feb. 6	16.9	Oct. 18	-11 43 42.4	Dec. 31	40.1
Sept. 18	-13 2 18.0	Dec. 6	28.4	Sept. 28	18.0	ζ Pegasi.		α Pegasi.	
19	18.7	16	28.9	Oct. 9	17.5	Jan. 2	+9 59 32.8	Jan. 2	+14 20 26.4
Nov. 28	19.3	26	29.1	10	17.4	Dec. 17	33.1	Feb. 15	25.4
π Capricorni.		ϵ Cygni.		Groombridge 3548 S.P.		26	33.7	Sept. 22	26.3
		Jan. 9	+33 22 14.7	Feb. 27	+86 21 29.2			Oct. 15	26.2
Sept. 19	-18 44 3.7	η Cephei.		Mar. 2	30.6	59 Pegasi.		60 Pegasi.	
λ Ursæ Minoris.		Jan. 15	+61 12 54.1	6	31.2	Jan. 2	+9 59 32.8		
		16	54.0	12	30.3	Dec. 17	33.1	Jan. 2	+7 50 49.2
Sept. 18	+88 49 33.7	Groombridge 3402 S.P.		21	29.2	26	33.7		
19	34.3			ϵ Pegasi.		π Pegasi.			
20	33.0	Mar. 2	+88 37 33.1	Jan. 26	+9 8 24.2	Jan. 15	+29 22 52.0	Jan. 9	+25 58 43.9
21	33.2	12	31.5	Sept. 28	23.9	21	51.3		
Oct. 2	34.3	21	32.8	Oct. 8	22.5				
Nov. 16	34.1	23	32.5	10	23.0				
20	34.0	24	33.4						

ϕ Aquarii.		α^1 Piscium.		ι Piscium.		γ Cephei.		ω Piscium.	
Sept. 21	- 6 54 54.8	Sept. 21	+ 0 22 31.3	Sept. 22	+ 4 45 15.1	Oct. 12	+ 76 44 3.1	Sept. 22	+ 5 58 19.7
22	55.1	22	31.0	Oct. 12	15.5	26	3.1	Nov. 16	18.7
96 Aquarii.		Groombridge 4101 S.P.		Nov. 5	15.6	λ Piscium.		17	17.8
Oct. 19				16	15.0	Oct. 19		29 Piscium.	
				γ Cephei.		20			
65 Pegasi.		Mar. 2		Jan. 20	+ 76 44 2.5	+ 0 53 40.2		Oct. 19	
		5		Feb. 15	2.8	40.6		20	
		6		25	2.7	78 Pegasi.		- 3 55 24.4	
		12		27	2.6			25.4	
Jan. 9		18		Mar. 4	4.2	Jan. 15			
+ 19 56 49.4		8.8				+ 28 28 11.8			

CATALOGUE
OF THE
MEAN RIGHT ASCENSIONS AND DECLINATIONS
OF THE STARS OBSERVED,
FOR JANUARY 1, 1839.

CATALOGUE OF THE MEAN RIGHT ASCENSIONS AND DECLINATIONS OF THE STARS OBSERVED,
REDUCED TO JANUARY 1, 1839.

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
2881	α Andromedæ.....	<i>h. m. s.</i> 0 0 4.67	<i>° ' "</i> + 28 12 4.6	28	12
8	22 Andromedæ.....	.....	+ 45 10 34.8	...	1
13	γ Pegasi.....	0 4 57.10	+ 14 17 18.0	20	6
23	41 Piscium	0 12 19.07	+ 7 17 44.5	3	3
32	10 Ceti	0 18 21.94	.....	1	...
33	47 Piscium .....	.....	+ 17 0 1.5	...	3
37	12 Ceti	0 21 49.17	.....	1	...
39	λ Cassiopeæ	0 22 55.55	.....	1	...
53	π Andromedæ.....	.....	+ 32 49 56.1	...	2
60	α Cassiopeæ .....	.....	+ 55 39 12.0	...	8
61	55 Piscium	0 31 27.71	.....	1	...
67	β Ceti	0 35 30.24	- 18 52 15.9	7	3
73	57 Piscium .....	.....	+ 14 35 46.8	...	1
78	η Cassiopeæ.....	0 39 24.17	.....	1	...
81	δ Piscium	0 40 20.03	.....	3	...
82	64 Piscium	0 40 31.30	.....	2	...
84	{ 65 Piscium preceding	0 41 14.92	.....	3	...
	{ 65 Piscium following	0 41 15.34	.....	3	...
85	ϕ^2 Ceti	0 42 3.44	.....	3	...
...	Groombridge 144 S. P.	0 42 28.65	+ 88 9 22.3	5	5
87	66 Piscium	0 46 4.21	.....	3	...
88	36 Andromedæ.....	0 46 21.44	.....	4	...
89	γ Cassiopeæ	0 47 2.64	.....	2	...
90	67 Piscium	0 47 19.50	.....	2	...
91	Cephei S. P.	0 47 56.27	+ 85 23 23.0	5	5
95	ϕ^3 Ceti	0 47 56.91	.....	3	...
...	Groombridge 195 S. P.	0 50 43.47	+ 86 17 1.8	5	5
103	ϵ Piscium	0 54 35.50	+ 7 1 17.9	4	2
104	25 Ceti	0 54 54.03	.....	3	...
109	27 Ceti	0 57 33.10	.....	1	...
110	28 Ceti	0 58 0.48	.....	4	...
114	30 Ceti	0 59 40.48	.....	2	...
118	η Ceti	1 0 29.48	.....	3	...
119	β Andromedæ.....	1 0 44.16	.....	3	...
120	ψ^3 Piscium	1 1 13.30	+ 18 47 52.7	2	1
121	θ Cassiopeæ.....	1 1 20.62	.....	3	...
115	α Ursæ Minoris	1 1 54.45	+ 88 27 3.0	53	40
...	..... S. P.	54.74	2.7	45	50
124	32 Ceti	1 2 7.43	.....	3	...
126	τ Piscium	1 2 48.51	.....	3	...
127	χ Piscium	1 2 48.63	.....	2	...
147	δ Cassiopeæ	1 15 20.48	.....	2	...
148	44 Ceti	1 15 56.78	.....	1	...
149	θ^1 Ceti	1 15 58.56	- 9 0 56.8	8	2
152	46 Ceti	1 17 41.99	.....	3	...
155	47 Ceti	1 18 54.80	.....	2	...
166	η Piscium	1 22 52.63	+ 14 30 48.1	2	1

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
177	50 Ceti	<i>h. m. s.</i> 1 28 7.80	<i>° ' "</i>	3	...
179	Ceti	1 29 34.84	.....	3	...
189	ο Piscium	1 36 54.04	.....	3	...
196	ε Cassiopeæ	1 42 53.15	.....	3	...
197	ζ Ceti	1 43 30.84	.....	3	...
198	α Trianguli	1 43 55.11	.....	3	...
199	γ Arietis	1 44 42.40	.....	1	...
201	β Arietis	1 45 45.70	+20 1 6.0	1	1
202	7 Arietis	1 46 53.10	.....	2	...
226	Arietis	1 57 35.82	.....	3	...
227	α Arietis	1 58 6.65	+22 41 52.5	24	9
233	ι Trianguli	2 3 2.84	.....	1	...
234	63 Ceti	2 3 25.45	.....	2	...
239	θ ¹ Arietis	2 9 11.17	+19 9 11.0	1	1
242	9 Persei	2 11 10.94	.....	2	...
243	ο Ceti	2 11 12.90	.....	2	...
244	69 Ceti	2 13 42.06	.....	1	...
245	70 Ceti	2 14 0.48	.....	1	...
250	71 Ceti	2 16 50.44	.....	3	...
259	ψ Arietis .....	.....	+16 59 16.9	...	1
263	σ Ceti	2 24 27.51	.....	3	...
266	77 Ceti	2 26 46.22	.....	1	...
268	Ceti .....	.....	+ 6 6 54.2	...	1
276	ν Arietis	2 29 41.16	.....	1	...
277	33 Arietis	2 31 17.47	.....	3	...
280	ε Ceti	2 31 46.74	.....	2	...
281	81 Ceti	2 32 59.37	.....	1	...
287	35 Arietis	2 34 1.17	.....	1	...
289	γ Ceti	2 34 57.83	+ 2 33 12.0	6	4
298	39 Arietis	2 38 20.38	.....	1	...
299	Persei	2 39 0.05	.....	2	...
308	τ Persei	2 42 53.19	.....	1	...
315	Arietis	2 47 37.60	.....	1	...
319	ε Arietis	2 50 1.07	+20 41 31.4	1	1
322	λ Ceti	2 51 5.66	.....	1	...
323	5 Eridani	2 51 33.80	.....	1	...
329	γ Persei	2 53 10.89	.....	1	...
330	g ¹ Eridani	2 53 15.23	.....	3	...
332	α Ceti	2 53 52.15	+ 3 27 14.0	8	6
335	g ² Eridani	2 54 48.32	.....	3	...
334	g ³ Persei	2 54 53.00	.....	1	...
339	g ³ Eridani	2 56 22.40	.....	3	...
348	δ Arietis	3 2 25.92	+19 6 47.0	2	1
355	ζ Eridani	3 8 0.96	.....	1	...
357	95 Ceti	3 10 8.45	.....	3	...
359	Tauri	3 10 36.71	.....	3	...
360	κ ¹ Ceti	3 10 55.28	.....	2	...
366	κ ² Ceti	3 12 41.88	.....	3	...
365	α Persei .....	.....	+49 16 55.0	...	6
...	Groombridge 642	3 14 36.06	.....	3	...
...	..... S. P.	36.91	+86 7 13.3	5	5

148 CATALOGUE OF MEAN RIGHT ASCENSIONS AND DECLINATIONS OF STARS FOR JAN. 1. 1839.

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
371	Camelopardi.....	<i>h. m. s.</i> 3 16 5.05	<i>° ' "</i>	3	...
373	Camelopardi.....	3 17 6.63	.....	2	...
377	σ Persei	3 19 15.18	.....	3	...
380	17 Eridani.....	3 22 38.01	.....	2	...
384	\downarrow Persei	3 25 4.53	.....	3	...
385	ϵ Eridani.....	3 25 20.92	- 10 0 25.7	2	1
388	10 Tauri	3 28 39.64	.....	2	...
389	20 Eridani	3 28 57.50	.....	2	...
391	21 Eridani.....	3 31 4.48	.....	3	...
395	12 Tauri	3 31 28.23	.....	3	...
393	δ Persei	3 31 29.28	.....	3	...
397	22 Eridani.....	3 32 40.26	.....	3	...
400	Persei	3 34 14.22	.....	3	...
406	δ Eridani.....	3 35 32.30	.....	2	...
407	Eridani.....	3 35 52.69	.....	2	...
412	29 Tauri	3 37 7.40	.....	3	...
...	* $7\frac{1}{2}^m$ (Pleiadum)	3 37 45.64	+ 23 13 19.2	3	3
414	η Tauri	3 37 55.51	+ 23 36 5.8	9	5
415	π Eridani.....	3 38 32.09	.....	3	...
416	Tauri	3 38 49.44	.....	3	...
...	26 Tauri (Pleiadum)	3 39 23.63	+ 23 21 32.5	3	3
...	Piazzi III. 165 (Pleiad.)	3 40 24.83	+ 23 21 12.6	3	3
427	31 Tauri	3 43 25.46	.....	3	...
430	ζ Persei	3 44 1.34	.....	2	...
431	30 Eridani.....	3 44 44.67	.....	2	...
432	32 Eridani.....	3 46 12.61	.....	3	...
433	ϵ Persei	3 47 4.04	.....	3	...
...	Groombridge 750	3 48 2.68	+ 85 6 58.3	2	2
...	..... S. P.	3.52	59.8	5	5
438	ξ Persei	3 48 32.02	.....	3	...
440	γ^1 Eridani.....	3 50 31.18	- 13 58 16.8	8	1
445	35 Eridani.....	3 53 22.71	- 2 0 20.4	3	3
446	ν Tauri	3 54 35.88	.....	2	...
448	37 Tauri	3 55 11.12	+ 21 38 11.0	3	2
460	37 Eridani.....	4 2 31.43	- 7 20 59.0	3	2
461	45 Tauri	4 2 46.30	+ 5 5 55.2	2	2
462	μ Persei	4 3 5.91	.....	2	...
464	\circ Eridani.....	4 4 0.53	.....	3	...
465	46 Tauri	4 4 53.19	.....	3	...
466	47 Tauri	4 5 11.30	.....	3	...
467	Persei	4 6 9.62	.....	3	...
470	39 Eridani.....	4 6 44.21	.....	3	...
469	μ Tauri	4 6 47.77	.....	3	...
472	40 Eridani	4 7 51.80	.....	3	...
491	66 Tauri	4 15 5.40	+ 9 4 48.6	3	2
495	ϵ Eridani	4 15 40.04	- 4 7 22.8	3	2
502	ν^1 Tauri	4 16 40.89	+ 22 36 33.0	1	1
513	44 Eridani.....	4 20 13.08	.....	3	...
521	45 Eridani.....	4 23 38.69	.....	3	...
524	46 Eridani.....	4 26 3.90	- 7 4 54.2	3	2
526	Eridani.....	4 26 24.19	- 7 10 40.8	3	1

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
527	47 Eridani.....	^{h.} ^{m.} ^{s.} 4 26 26.55	..... ° ' "	3	...
528	α Tauri.....	4 26 41.30	+ 16 10 46.5	24	10
530	ν ² Eridani.....	4 28 16.53	.....	3	...
532	49 Eridani.....	4 28 56.06	.....	3	...
535	51 Eridani.....	4 29 29.99	.....	3	...
539	53 Eridani.....	4 30 48.51	.....	3	...
542	Eridani.....	4 31 55.56	.....	3	...
543	τ Tauri.....	4 32 35.32	+ 22 38 31.6	1	1
547	Tauri.....	4 35 30.65	.....	3	...
551	μ Eridani.....	4 37 27.17	- 3 33 19.3	3	3
552	Camelopardi.....	4 38 5.30	+ 66 3 29.8	3	3
554	58 Eridani.....	4 40 22.61	.....	3	...
556	1 Orionis.....	4 41 6.11	.....	3	...
557	59 Eridani.....	4 41 17.96	.....	3	...
558	π ¹ Orionis.....	4 41 50.51	.....	3	...
560	3 Orionis.....	4 42 37.99	.....	3	...
562	60 Eridani.....	4 42 56.40	.....	3	...
565	5 Orionis.....	4 44 59.16	.....	3	...
566	ω Eridani.....	4 44 59.11	.....	3	...
567	6 Orionis.....	4 45 51.27	.....	3	...
568	8 Orionis.....	4 45 52.18	.....	2	...
569	π ² Orionis.....	4 46 2.19	.....	3	...
574	ω Aurigæ.....	4 48 20.18	.....	3	...
576	62 Eridani.....	4 48 28.44	.....	3	...
577	10 Camelopardi.....	4 49 7.47	+ 60 11 48.0	3	3
579	10 Orionis.....	4 50 12.30	+ 1 27 40.0	3	2
580	ε Aurigæ.....	4 50 25.65	.....	3	...
582	ζ Aurigæ.....	4 51 14.13	.....	2	...
583	63 Eridani.....	4 52 13.31	.....	3	...
584	64 Eridani.....	4 52 26.85	.....	3	...
585	ι Tauri.....	4 53 28.63	+ 21 21 12.9	1	1
586	↓ Eridani.....	4 53 38.07	.....	3	...
588	η Aurigæ.....	4 55 14.06	.....	3	...
599	66 Eridani.....	4 58 48.07	.....	3	...
601	14 Orionis.....	4 59 7.10	.....	3	...
603	β Eridani.....	4 59 56.17	.....	3	...
605	16 Orionis.....	5 0 28.52	+ 9 36 57.8	1	3
608	μ Aurigæ.....	5 2 25.37	.....	2	...
613	ι Leporis.....	5 4 47.45	.....	1	...
612	α Aurigæ.....	5 4 48.34	+ 45 49 33.5	42	13
619	β Orionis.....	5 6 48.14	- 8 23 34.6	26	4
620	18 Orionis.....	5 7 7.77	.....	1	...
625	τ Orionis.....	5 9 47.54	.....	3	...
...	Groombridge 944.....	5 11 6.21	+ 85 5 19.8	1	1
...	..... S. P.	5 20	20.3	5	5
631	λ Leporis.....	5 12 9.61	- 13 20 53.5	3	2
639	23 Orionis.....	5 14 22.54	.....	3	...
642	β Tauri.....	5 16 7.13	+ 28 27 51.6	31	7
643	ξ Leporis.....	5 16 8.30	.....	1	...
645	27 Orionis.....	5 16 18.00	.....	2	...
648	γ Orionis.....	.....	+ 6 11 51.5	...	6

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
653	ψ^2 Orionis.....	<i>h. m. s.</i> 5 18 24.41	<i>° ' "</i>	3	...
660	31 Orionis.....	5 21 33.67	.....	2	...
665	δ Orionis.....	5 23 46.98	- 0 25 27.6	14	3
668	ν Orionis.....	5 24 8.83	.....	2	...
673	α Leporis.....	.....	-17 56 33.5	...	5
676	ϕ^1 Orionis.....	5 25 59.14	.....	3	...
686	ϵ Orionis.....	5 28 2.76	- 1 18 37.9	9	3
685	ϕ^2 Orionis.....	5 28 3.92	.....	1	...
687	26 Aurigæ.....	5 28 17.94	.....	2	...
690	σ Orionis.....	5 30 40.07	.....	3	...
...	*	5 31 55.45	+27 40 51.6	4	3
698	ζ Orionis.....	5 32 38.23	- 2 2 0.6	3	4
...	*	5 34 14.04	+27 39 2.3	4	3
710	52 Orionis.....	5 39 21.35	+ 6 23 27.8	1	2
711	ζ Leporis	5 39 39.85	.....	3	...
714	ν Aurigæ.....	5 40 20.14	.....	1	...
722	136 Tauri.....	5 43 12.59	+27 34 0.8	4	2
725	55 Orionis.....	5 43 35.85	.....	3	...
733	δ Aurigæ.....	5 46 16.55	.....	3	...
734	α Orionis.....	5 46 27.43	+ 7 22 14.4	14	7
735	β Aurigæ.....	.....	+44 55 20.2	...	4
738	θ Aurigæ.....	5 48 44.67	+37 11 37.0	3	3
739	η Leporis.....	.....	-14 12 7.7	...	3
744	2 Monocerotis.....	5 51 25.87	.....	3	...
747	μ Orionis.....	5 53 31.70	.....	3	...
752	66 Orionis.....	5 56 28.16	.....	2	...
763	τ Leporis.....	6 0 41.47	-19 9 4.5	1	1
761	Camelopardi	6 1 5.91	+69 21 48.0	...	3
770	1 Lyncis	6 3 3.93	.....	3	...
774	κ Aurigæ	6 5 7.15	+29 33 0.2	5	4
776	2 Lyncis	6 5 24.95	.....	3	...
781	5 Monocerotis.....	6 7 0.29	.....	1	...
788	7 Monocerotis.....	6 11 57.69	.....	3	...
789	46 Aurigæ.....	.....	+49 21 40.1	...	3
790	μ Geminorum	6 13 13.19	+22 35 21.0	17	8
793	Monocerotis.....	6 14 49.78	.....	2	...
802	77 Orionis.....	6 18 57.92	.....	2	...
...	51 (Hevelii) Cephei.....	6 22	+87 15 47.2	...	13
...	..... S. P.	..... 53.26	..... 47.1	5	6
812	12 Monocerotis.....	6 23 46.71	.....	1	...
813	13 Monocerotis.....	.....	+ 7 26 39.8	...	3
816	Canis Majoris.....	.....	-17 57 6.1	...	1
819	14 Monocerotis.....	6 26 3.33	.....	3	...
822	54 Aurigæ.....	.....	+28 23 53.6	...	1
823	γ^2 Canis Majoris	6 29 39.94	.....	1	...
825	25 Geminorum	6 31 12.21	.....	1	...
828	26 Geminorum .....	.....	+17 47 47.3	...	1
831	ϵ Geminorum	6 34 1.40	+25 17 0.5	7	5
830	42 Camelopardi.....	6 34 8.10	.....	3	...
832	28 Geminorum.....	6 34 32.97	.....	1	...
836	ξ^2 Geminorum.....	.....	+13 3 48.7	...	1

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
835	43 Camelopardi	<i>h. m. s.</i>	<i>° ' "</i> + 69 3 46.0	...	1
834	Camelopardi .....	.....	+ 77 9 55.1	...	3
837	16 Monocerotis	6 37 45.59	.....	3	...
838	α Canis Majoris	6 38 3.25	- 16 30 2.2	14	5
840	18 Monocerotis	6 39 28.00	.....	3	...
841	ψ^2 Canis Majoris	6 39 30.59	.....	1	...
842	33 Geminorum .....	.....	+ 16 22 46.2	...	1
844	36 Geminorum	6 41 53.63	.....	1	...
...	Groombridge 1119	6 42 8.54	+ 89 3 3.0	5	4
...	..... S. P.	5.12	4.4	5	2
847	15 Lyncis	6 43 19.07	.....	3	...
854	θ Canis Majoris	6 46 42.77	.....	3	...
860	π^3 Canis Majoris .....	.....	- 19 56 9.8	...	3
863	ι Canis Majoris	6 48 57.54	.....	2	...
870	ω^1 Geminorum	6 52 35.97	.....	1	...
873	19 Monocerotis	6 54 55.25	.....	3	...
878	γ Canis Majoris	6 56 28.59	.....	2	...
874	Camelopardi	6 56 48.65	.....	1	...
880	63 Aurigæ	7 0 34.41	+ 39 34 32.2	3	3
881	τ Geminorum	7 0 53.06	+ 30 30 7.1	3	3
884	20 Monocerotis	7 2 13.92	- 3 59 28.4	3	3
887	22 Monocerotis	7 3 38.53	- 0 13 55.4	3	1
900	δ Geminorum	7 10 30.09	+ 22 16 19.3	13	5
902	65 Aurigæ	7 11 16.84	.....	2	...
911	ι Geminorum	7 15 43.26	+ 28 6 41.0	3	3
912	1 Canis Minoris	7 16 1.40	+ 11 58 42.8	3	3
913	ε Canis Minoris	7 16 50.72	+ 9 35 14.9	3	3
917	β Canis Minoris	7 18 25.03	.....	3	...
920	η Canis Minoris	7 19 22.49	.....	3	...
921	γ Canis Minoris	7 19 23.58	.....	3	...
925	δ^1 Canis Minoris	7 23 44.18	.....	3	...
927	α Geminorum preceding ..	7 24 18.61	.....	22	...
	α Geminorum following ..	7 24 19.04	+ 32 14 3.2	22	6
930	δ^2 Canis Minoris .....	.....	+ 3 37 39.8	...	3
932	δ^3 Canis Minoris	7 25 49.00	+ 3 42 54.9	3	3
933	ν Geminorum	7 25 59.57	.....	1	...
938	25 Monocerotis	7 29 16.45	- 3 45 25.3	3	3
941	α Canis Minoris	7 30 52.12	+ 5 37 55.5	32	14
944	26 Monocerotis	7 33 33.26	- 9 10 49.7	3	1
947	λ Geminorum	7 34 43.20	+ 24 46 40.4	2	2
948	β Geminorum	7 35 27.28	+ 28 24 31.5	33	11
953	π Canis Minoris	7 37 24.23	+ 11 9 16.7	3	3
955	4 Argûs	7 38 32.04	- 14 10 38.8	3	3
959	6 Argûs	7 42 24.72	- 16 49 22.6	2	2
964	9 Argûs	7 44 18.84	.....	3	...
968	Canis Minoris	7 46 46.42	.....	3	...
973	14 Canis Minoris	7 49 59.70	+ 2 38 55.7	3	3
983	28 Monocerotis	7 53 1.70	- 0 57 3.2	1	3
984	6 Cancri	7 53 37.18	+ 28 14 22.4	4	2
985	13 Argûs	7 53 53.28	+ 2 46 15.5	3	1
988	55 Camelopardi	7 56 42.03	1	...

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No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
994	29 Monocerotis.....	^{h.} ^{m.} ^{s.} 8 0 29.86	° ' " - 2 31 11.3	3	3
996	16 Argus.....	.....	- 18 46 39.6	...	3
1008	β Cancrī.....	8 7 46.50	.....	2	...
...	Groombridge 1418.....	8 8 0.68	+ 85 36 2.1	5	5
1012	λ Cancrī.....	8 10 57.22	+ 24 31 25.0	1	1
1018	22 Argus.....	8 15 12.49	- 12 32 29.5	1	3
1021	1 Hydræ.....	8 16 33.19	- 3 14 2.8	2	1
1020	• Ursæ Majoris.....	.....	+ 61 14 55.5	...	3
1030	2 Hydræ.....	8 18 24.51	.....	3	...
1035	θ Cancrī.....	8 22 24.28	+ 18 38 0.3	1	1
1041	Monocerotis.....	8 24 16.82	- 19 2 14.1	3	3
1042	π ² Ursæ Majoris.....	.....	+ 64 52 56.3	...	3
1044	{ Hydræ preceding.....	8 27 17.03	.....	4	...
	{ Hydræ following.....	8 27 17.32	.....	4	...
...	* 8 ^m R. A. 8 ^h 28 ^m 20 ^s.....	.....	+ 20 17 19.3	...	2
1046	δ Hydræ.....	8 29 7.55	.....	3	...
1047	σ Hydræ.....	8 30 20.20	.....	2	...
1057	6 Hydræ.....	8 32 23.82	.....	3	...
1060	γ Cancrī.....	8 33 57.70	+ 22 2 34.0	2	2
1063	9 Hydræ.....	8 34 14.95	.....	2	...
1066	δ Cancrī.....	8 35 31.58	+ 18 44 27.4	2	1
1069	ι Cancrī.....	8 36 56.44	+ 29 20 31.3	2	3
1073	ι Hydræ.....	8 38 14.63	+ 7 0 16.8	8	3
1074	12 Hydræ.....	.....	- 12 57 47.3	...	3
1075	Hydræ.....	.....	- 1 18 41.8	...	1
1076	ε Hydræ.....	8 39 54.00	.....	3	...
1079	14 Hydræ.....	8 41 16.11	.....	3	...
1083	ε ² Cancrī.....	8 42 59.48	.....	2	...
1087	ε ⁴ Cancrī.....	8 46 0.04	.....	1	...
1089	ζ Hydræ.....	8 46 52.52	.....	3	...
1092	ι Ursæ Majoris.....	.....	+ 48 40 6.9	...	3
1099	Ursæ Majoris.....	8 52 35.92	+ 47 47 16.2	3	3
1103	Lyncis.....	8 56 15.90	+ 39 5 26.2	3	3
1104	ω Hydræ.....	8 57 29.44	+ 5 43 52.2	3	1
1109	ξ Cancrī.....	9 0 5.43	+ 22 41 31.7	5	3
1113	20 Hydræ.....	9 1 42.97	- 8 8 16.9	3	3
1116	π ¹ Cancrī.....	9 3 28.48	.....	1	...
1117	Cancrī.....	9 4 24.75	+ 21 56 31.3	3	3
1119	21 Hydræ.....	9 4 28.83	.....	3	...
1118	18 Ursæ Majoris.....	.....	+ 54 40 52.6	...	2
1122	π ² Cancrī.....	9 6 19.93	.....	2	...
1126	23 Hydræ.....	9 8 41.77	.....	3	...
1130	83 Cancrī.....	9 9 59.08	+ 18 23 0.5	2	2
1131	40 Lyncis.....	9 11 13.68	.....	3	...
1134	26 Hydræ.....	.....	- 11 17 55.6	...	3
1136	27 Hydræ.....	9 12 37.12	- 8 52 34.6	3	3
1135	Draconis.....	.....	+ 82 1 38.7	...	3
1141	Leonis.....	9 15 40.93	.....	1	...
1147	α Hydræ.....	9 19 40.46	- 7 57 51.0	7	8
1151	τ ¹ Hydræ.....	9 20 58.41	.....	3	...
1152	θ Ursæ Majoris.....	.....	+ 52 24 23.9	...	7

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
1153	λ Leonis	<i>h. m. s.</i> 9 22 31.27	<i>° ' "</i> + 23 40 25.4	4	2
1157	τ^2 Hydræ	9 23 46.19	.....	3	...
1158	10 Leonis Minoris .....	.....	+ 37 6 29.2	...	3
1161	33 Hydræ .....	.....	- 5 11 59.0	...	3
1169	ι Hydræ	9 31 37.80	- 0 24 55.3	3	3
1171	ϕ Leonis	9 32 33.16	+ 10 37 16.5	4	2
1172	κ Hydræ	9 32 35.08	.....	3	...
1174	ψ Leonis	9 34 57.12	+ 14 45 17.1	1	1
1175	ϵ Leonis	9 36 41.97	+ 24 30 44.3	9	6
1179	ν Ursæ Majoris .....	.....	+ 59 47 29.2	...	3
1181	ϕ Ursæ Majoris .....	.....	+ 54 48 45.7	...	3
1184	22 Leonis	9 42 43.81	+ 25 9 12.4	3	3
1185	6 Sextantis	9 43 7.18	.....	3	...
1192	10 Sextantis	9 47 53.31	.....	1	...
1193	ν Leonis	9 49 33.22	+ 13 12 35.1	1	1
1195	Sextantis	9 51 21.74	.....	1	...
1199	Hydræ	9 54 44.77	- 12 31 24.7	3	3
1203	ν^2 Hydræ	9 57 16.97	- 12 17 10.8	3	3
1204	21 Leonis Minoris	9 57 54.66	.....	3	...
1206	η Leonis	9 58 32.55	+ 17 32 41.1	1	1
1209	α Leonis	9 59 47.43	+ 12 45 5.0	22	12
1211	17 Sextantis .....	.....	- 7 37 11.9	...	3
1212	λ^2 Hydræ	10 2 44.18	- 11 33 39.6	3	3
...	Groombridge 1620	10 5 5.57	+ 85 3 45.9	5	5
1218	21 Sextantis	10 6 6.92	.....	3	...
1224	22 Sextantis	10 9 37.65	.....	3	...
1228	γ Leonis preceding	10 11 5.03	+ 20 39 11.0	1	2
...	γ Leonis following	10 11 5.20	.....	1	...
1231	23 Sextantis	10 12 42.70	.....	1	...
1230	μ Ursæ Majoris	10 12 42.82	+ 42 18 24.0	3	3
1236	30 Leonis Minoris	10 16 39.96	+ 34 36 48.7	3	3
1238	μ Hydræ	10 18 18.27	- 16 0 59.7	3	3
1245	Sextantis	10 20 34.32	.....	3	...
1254	ξ Leonis	10 24 19.67	.....	3	...
1255	37 Ursæ Majoris .....	.....	+ 57 54 32.8	...	3
1260	1 Hydræ & Crateris	10 28 25.02	- 15 30 45.2	3	3
1261	37 Leonis Minoris .....	.....	+ 32 48 37.4	...	3
1265	ϕ^3 Hydræ & Crateris	10 30 44.39	.....	3	...
1267	33 Sextantis	10 33 12.64	.....	1	...
1269	40 Leonis Minoris	10 31 10.75	.....	3	...
1274	42 Leonis Minoris .....	.....	+ 31 31 41.1	...	3
1282	3 Hydræ & Crateris	10 38 58.98	- 16 26 58.6	3	3
1284	53 Leonis	10 40 47.32	+ 11 23 43.1	3	1
1285	44 Leonis Minoris	10 41 1.93	.....	3	...
1287	ν Hydræ & Crateris	10 41 41.00	.....	3	...
1292	6 Hydræ & Crateris	10 45 37.13	.....	3	...
1295	55 Leonis	10 47 25.22	.....	1	...
1300	α Hydræ & Crateris	10 51 55.97	- 17 26 34.6	3	3
1301	β Ursæ Majoris .....	.....	+ 57 14 38.2	...	2
1305	α Ursæ Majoris .....	.....	+ 62 37 7.1	...	13

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
...	* 8 ^m R. A. 10 ^h 53 ^m 53 ^s	<i>h. m. s.</i>	<i>° ' "</i> + 9 44 2.3	...	1
1310	ζ Leonis	10 56 42.70	+ 8 12 17.5	2	3
1314	67 Leonis	11 0 10.28	+25 31 44.0	3	3
1315	↓ Ursæ Majoris .....	.....	+45 22 14.9	3	...
1320	δ Leonis	11 5 32.21	+21 24 17.0	30	12
1333	δ Hydræ & Crateris	11 11 17.71	-13 54 28.7	8	7
1334	σ Leonis	11 12 49.87	+ 6 54 38.1	1	3
1337	λ Hydræ & Crateris	11 15 23.14	.....	3	...
1338	ι Leonis .....	.....	+11 24 54.8	...	2
1339	79 Leonis	11 15 46.54	.....	2	...
...	* 8 ^m R. A. 11 ^h 17 ^m 6 ^s...	.....	+ 8 50 22.6	...	1
1346	κ Hydræ & Crateris	11 19 3.12	.....	3	...
1347	τ Leonis	11 19 39.53	+ 3 44 31.6	1	1
...	* 7 ^m R. A. 11 ^h 21 ^m 13 ^s	.....	+ 8 29 11.9	...	1
1351	86 Leonis	11 22 4.35	.....	3	...
1361	θ Hydræ & Crateris	11 28 30.91	.....	3	...
1362	υ Leonis	11 28 42.35	+ 0 3 52.6	1	1
...	* 7 ^m R. A. 11 ^h 29 ^m 2 ^s...	.....	+ 7 9 36.6	...	1
1365	24 Hydræ & Crateris	11 30 29.56	.....	3	...
1367	Virginis	11 35 41.73	.....	1	...
1368	ζ Hydræ & Crateris	11 36 36.44	.....	3	...
1371	υ Virginis .....	.....	+ 7 25 51.9	...	3
1373	93 Leonis	11 39 40.40	.....	3	...
1375	β Leonis	11 40 50.56	+15 28 18.4	24	20
1376	β Virginis	11 42 18.59	+ 2 40 18.7	2	2
1379	γ Ursæ Majoris .....	.....	+54 35 23.9	...	8
1382	η Hydræ & Crateris	11 47 49.05	.....	3	...
1390	Virginis	11 55 31.21	.....	1	...
1391	2 Comæ Berenicee	11 56 1.58	.....	1	...
...	Groombridge 1850	11 56 27.71	+86 28 45.8	5	5
1392	ο Virginis	11 57 0.38	+ 9 37 37.2	2	2
1393	Virginis	11 57 45.46	.....	1	...
...	* 7 ^m R. A. 11 ^h 59 ^m 20 ^s	.....	+ 5 24 36.7	...	1
1397	10 Virginis	12 1 26.27	.....	1	...
1415	η Virginis	12 11 40.21	+ 0 13 41.3	5	2
1422	17 Virginis	12 14 20.69	.....	1	...
...	Groombridge 1884	12 14 25.11	+88 35 31.7	5	5
1432	Virginis	12 19 36.26	.....	1	...
1434	Virginis	12 20 5.83	.....	1	...
1445	20 Virginis	12 24 53.81	.....	1	...
1446	21 Virginis	12 25 28.49	- 8 33 45.2	4	1
1465	γ Virginis	12 33 30.37	- 0 33 53.8	1	1
1488	↓ Virginis	12 45 59.16	- 8 39 47.2	3	3
1492	12 Canum Venaticorum	12 48 29.18	+39 11 21.3	31	7
1506	49 Virginis	12 59 28.06	.....	1	...
1511	θ Virginis	13 1 37.15	- 4 40 39.2	4	2
1533	α Virginis	13 16 43.12	-10 19 7.2	11	8
1534	ζ Ursæ Majoris .....	.....	+55 46 4.8	...	11
...	Groombridge 2007	13 21 27.52	+85 35 45.6	5	5
1550	ζ Virginis	13 26 29.43	.....	1	...

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
1556	82 Virginis.....	<i>h. m. s.</i> 13 33 10.05	.....	2	...
1574	89 Virginis.....	13 41 8.00	.....	5	...
1575	η Ursæ Majoris .....	.....	+ 50 7 8.9	...	17
1587	η Bootis	13 47 1.10	+ 19 12 26.5	31	12
1614	Virginis.....	14 4 7.20	.....	1	...
1620	α Bootis.....	14 8 19.16	+ 20 1 24.8	37	14
1672	ε Bootis.....	14 37 57.36	+ 27 45 22.5	16	7
1681	α^2 Libræ.....	14 41 58.92	- 15 22 5.1	9	2
1700	β Ursæ Minoris.....	.....	+ 74 48 49.0	...	14
1705	20 Libræ	14 54 39.46	.....	1	...
1721	ι^1 Libræ.....	15 3 3.17	.....	1	...
1732	β Libræ.....	15 8 21.08	- 8 47 2.7	6	3
1752	Libræ .....	.....	- 16 41 41.5	...	2
1770	α^1 Coronæ borealis	15 27 52.35	+ 27 15 37.8	29	7
1776	τ^2 Serpentis.....	.....	+ 16 39 23.9	...	1
1780	χ Libræ.....	15 30 46.29	.....	1	...
...	Groombridge 2283.....	15 32 32.51	+ 87 50 5.8	5	5
...	..... S. P.	33.78	6.4	2	1
1791	α Serpentis	15 36 20.49	+ 6 56 12.1	22	7
1800	1 Scorpïi	15 41 18.31	.....	2	...
1824	ζ Ursæ Minoris.....	.....	+ 78 17 11.6	...	6
1823	δ Scorpïi	15 50 49.31	.....	1	...
1836	β^1 Scorpïi.....	15 56 5.08	.....	2	...
1842	θ Draconis .....	.....	+ 58 59 49.2	...	2
1859	δ Ophiuchi.....	16 5 54.77	- 3 16 27.6	8	4
1872	σ Scorpïi.....	16 11 24.53	.....	1	...
1885	α Scorpïi	16 19 32.68	- 26 4 3.3	6	1
1892	η Draconis .....	.....	+ 61 52 48.5	...	9
...	*	16 42 39.72	+ 15 39 42.1	3	3
...	*	16 43 55.69	+ 16 4 25.0	3	3
1956	Ophiuchi	16 57 14.82	.....	1	...
1964	ε Ursæ Minoris.....	.....	+ 82 17 27.4	...	7
1970	α Herculis.....	17 7 18.50	+ 14 34 45.0	16	5
...	*	17 11 29.74	+ 28 54 36.5	3	3
1986	θ Ophiuchi	17 12 7.55	.....	1	...
...	*	17 15 30.56	+ 32 1 25.5	3	3
...	*	17 16 3.14	+ 32 8 40.8	3	3
...	*	17 20 59.50	+ 34 50 5.2	3	3
...	*	17 23 43.07	+ 35 4 6.8	3	3
...	*	17 26 7.46	+ 34 56 31.4	3	3
2016	β Draconis.....	.....	+ 52 25 23.9	...	5
2017	α Ophiuchi	17 27 27.79	+ 12 40 56.9	22	3
...	*	17 28 0.63	+ 34 39 19.8	3	3
...	*	17 28 59.47	+ 34 51 36.5	4	3
...	*	17 45 20.75	+ 41 14 48.6	3	3
...	*	17 50 4.21	+ 41 30 9.2	3	3
2071	γ Draconis.....	.....	+ 51 30 37.6	...	11
2122	λ Sagittarii	18 18 2.29	.....	1	...
2148	δ Ursæ Minoris	18 24 15.16	+ 86 35 27.9	40	18
...	..... S. P.....	14.78	27.3	36	19

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
...	24 Ursæ Minoris.....	<i>h. m. s.</i> 18 30 16.90	<i>° ' "</i> +86 57 56.6	5	5
...	..... S. P.	17.02	.....	3	...
2156	α Lyrae	18 31 29.24	+38 38 16.1	25	16
2177	β Lyrae	18 44 8.18	+33 10 48.3	50	5
2180	σ Sagittarii.....	18 45 16.81	.....	2	...
2208	τ Sagittarii	18 56 52.91	.....	1	...
2214	ζ Aquilæ	18 58 0.60	+13 37 45.3	36	3
2253	δ Draconis .....	.....	+67 22 41.7	...	1
2266	δ Aquilæ	19 17 22.78	+ 2 47 56.8	24	1
2317	γ Aquilæ	19 38 36.27	+10 13 32.2	30	2
2329	α Aquilæ	19 42 55.57	+ 8 26 53.2	34	9
2340	β Aquilæ	19 47 24.24	.....	19	...
2388	α^2 Capricorni	20 9 6.92	-13 2 18.7	2	3
2403	π Capricorni.....	20 18 5.90	-18 44 3.7	1	1
2409	69 Aquilæ	20 21 14.01	.....	1	...
...	λ Ursæ Minoris.....	.....	+88 49 33.9	...	12
...	..... S. P. ....	.....	33.0	...	5
2425	70 Aquilæ	20 28 20.52	.....	1	...
2433	1 Aquarii.....	20 31 9.73	.....	1	...
2439	α Delphini.....	.....	+15 20 53.4	...	1
2444	α Cygni	20 35 56.68	+44 42 28.6	24	14
2445	\downarrow Capricorni.....	20 36 33.18	.....	1	...
2451	3 Aquarii.....	20 39 14.37	.....	1	...
2455	ϵ Cygni .....	.....	+33 22 14.7	...	1
2465	η Cephei .....	.....	+61 12 54.0	...	2
...	Groombridge 3402 S. P.	20 45 18.38	+88 37 32.7	5	5
2512	ζ Cygni	21 6 5.21	+29 34 11.5	30	8
2516	29 Capricorni.....	21 6 49.58	.....	1	...
2536	α Cephei .....	.....	+61 54 18.9	...	10
2551	β Aquarii	21 23 4.70	- 6 16 31.8	10	2
2559	β Cephei .....	.....	+69 51 17.4	...	9
...	Groombridge 3548 S. P.	21 30 18.45	+86 21 30.1	5	5
2578	ϵ Pegasi.....	21 36 16.67	+ 9 8 23.4	14	4
2586	δ Capricorni	21 38 8.62	-16 51 15.1	2	4
2602	Aquarii	21 45 45.68	.....	1	...
2607	Aquarii	21 49 46.68	.....	1	...
2619	α Aquarii	21 57 30.78	- 1 5 57.0	13	8
2622	ι Aquarii.....	21 57 43.80	-14 38 51.7	2	2
2646	ζ Cephei .....	.....	+57 24 33.7	...	2
2655	θ Aquarii.....	22 8 20.00	- 8 34 55.2	2	2
2688	σ Aquarii.....	22 22 7.28	-11 29 58.5	2	2
2690	58 Aquarii	22 23 8.79	-11 43 42.4	1	1
2710	ζ Pegasi	22 33 26.03	+ 9 59 33.2	21	3
2716	η Pegasi.....	.....	+29 22 51.6	...	2
2727	μ Pegasi .....	.....	+23 45 10.6	...	1
2729	ι Cephei .....	.....	+65 21 17.9	...	2
2730	λ Aquarii.....	22 44 12.59	- 8 26 4.1	1	1
2741	α Piscis Australis .....	.....	-30 28 21.9	...	3
2753	β Pegasi .....	.....	+27 12 39.7	...	11
2755	α Pegasi	22 56 44.65	+14 20 26.1	23	4

CATALOGUE OF MEAN RIGHT ASCENSIONS AND DECLINATIONS OF STARS FOR JAN. 1, 1839. 157

No. of Astronom. Society's Catalogue.	STAR.	Mean Right Ascension.	Mean Declination.	No. of Observations.	
				Right Ascension.	Declina- tion.
2769	59 Pegasi.....	<i>h. m. s.</i>	<i>° ' "</i> + 7 50 49.2	...	1
2770	60 Pegasi.....	.....	+ 25 58 43.9	...	1
2772	φ Aquarii	23 5 58.90	- 6 54 55.0	5	2
2783	96 Aquarii .....	.....	- 6 0 10.7	...	1
2790	65 Pegasi.....	.....	+ 19 56 49.4	...	1
2798	α ¹ Piscium	23 18 40.74	+ 0 22 31.2	2	2
...	Groombridge 4101 S.P.	23 27 45.74	+ 86 25 10.1	6	5
2823	ι Piscium.....	23 31 40.31	+ 4 45 15.3	9	4
2826	γ Cephei .....	.....	+ 76 44 3.0	...	7
2829	λ Piscium.....	23 33 49.85	+ 0 53 40.4	3	2
2834	78 Pegasi.....	.....	+ 28 28 11.8	...	1
2865	ω Piscium.....	23 51 2.88	+ 5 58 18.7	6	3
2869	29 Piscium.....	23 53 34.22	- 3 55 24.9	3	2

REDUCED OBSERVATIONS
OF
THE SUN, MOON, AND PLANETS.

1839.

OBSERVED SIDEREAL TIME OF THE SUN'S DIAMETER PASSING THE MERIDIAN.

Date.	Observed Time.	Difference from Nautical Almanac.	Date.	Observed Time.	Difference from Nautical Almanac.
1839,			1839,		
January 2	m. s. 2 21.85	s. -0.07	May 24	m. s. 2 15.39	s. -0.17
8	21.28	+0.08	25	15.60	-0.10
9	21.04	-0.02	27	15.86	-0.12
14	20.14	-0.10	28	16.14	+0.02
15	19.98	-0.08	29	16.28	+0.04
16	19.76	-0.12	30	16.34	-0.02
17	19.46	-0.22			
23	18.32	-0.14	June 1	16.50	-0.10
24	18.03	-0.21	3	16.60	-0.20
25	18.02	0.00	4	16.90	0.00
26	17.90	+0.10	5	17.00	0.00
30	16.84	-0.06	11	17.42	-0.06
31	16.64	-0.02	13	17.44	-0.16
			14	17.64	0.00
February 1	16.40	-0.04	15	17.70	+0.02
2	16.20	-0.02	17	17.66	-0.08
5	15.42	-0.10	18	17.64	-0.12
6	15.18	-0.12	19	17.58	-0.18
12	13.96	0.00	25	17.70	-0.04
13	13.60	-0.14	28	17.62	0.00
15	13.28	-0.02	29	17.60	+0.04
18	12.66	-0.04			
19	12.38	-0.12	July 1	17.48	+0.04
20	12.12	-0.20	3	17.54	+0.26
22	11.90	-0.04	4	17.06	-0.14
23	11.74	-0.02	5	17.04	-0.08
25	11.42	+0.02	8	16.70	-0.12
26	11.16	-0.08	9	16.66	-0.06
27	11.01	-0.07	13	16.32	+0.08
			15	16.02	+0.06
March 1	10.96	+0.20	16	15.90	+0.08
4	10.22	-0.12	20	15.18	-0.06
6	9.88	-0.20	22	14.84	-0.08
12	9.40	-0.02	26	13.94	-0.34
13	9.12	-0.22	29	13.71	-0.07
19	8.90	-0.06	30	13.22	-0.38
22	8.82	-0.02			
25	8.84	+0.06	August 1	13.18	-0.06
26	8.64	-0.14	2	13.09	+0.01
30	8.58	-0.22	7	12.08	-0.14
			20	10.36	+0.18
April 8	9.18	0.00	21	10.04	0.00
10	9.24	-0.10	22	9.72	-0.18
11	9.26	-0.16	26	9.21	-0.19
12	9.38	-0.12	30	8.78	-0.18
13	9.56	-0.02			
20	10.18	-0.16	September 3	8.46	-0.14
24	10.72	-0.16	6	8.28	-0.10
27	11.16	-0.14	9	8.00	-0.20
			11	8.02	-0.10
May 1	11.57	-0.33	13	7.86	-0.20
2	11.84	-0.20	19	7.87	-0.17
7	12.86	+0.02	21	8.18	+0.10
10	13.29	-0.03	23	7.98	-0.16
11	13.40	-0.08	24	8.12	-0.06
17	14.52	+0.04	25	8.18	-0.04
20	14.82	-0.12	26	7.91	-0.35

Date.	Observed Time.	Difference from Nautical Almanac.	Date.	Observed Time.	Difference from Nautical Almanac.
1839, October 2	m. s. 2 8.70	s. +0.02	1839, November 11	m. s. 2 15.96	s. -0.06
3	8.66	-0.10	12	16.08	-0.18
5	8.92	-0.04	19	17.70	-0.20
7	8.92	-0.26	20	17.88	-0.24
9	9.44	+0.02	23	18.68	-0.10
11	9.54	-0.16	27	19.62	+0.02
15	10.12	-0.20	December 6	20.80	-0.36
18	10.90	+0.08	7	21.18	-0.12
19	11.00	0.00	21	22.48	+0.08
25	12.12	-0.04	23	22.36	-0.06
28	12.60	-0.20	25	22.36	-0.02
30	13.24	0.00	26	22.38	+0.02
November 9	15.23	-0.31	28	22.36	+0.08
Mean Difference from Nautical Almanac by 132 observations = - 0 ^s .08.					

VERTICAL DIAMETER OF THE SUN OBSERVED WITH THE MURAL CIRCLE.

Date.	Observed Diameter.	Difference from Nautical Almanac.	Date.	Observed Diameter.	Difference from Nautical Almanac.
1839, January 2	' " 32 36.9	" +2.3	1839, June 1	' " 31 34.8	" +0.4
8	32 37.6	+3.4	5	31 33.8	+0.4
March 19	32 8.4	-0.6	11	31 29.4	-2.6
26	32 1.8	-3.4	14	31 31.9	+0.3
30	32 0.7	-2.3	15	31 32.4	+1.0
April 8	31 57.8	-0.2	17	31 34.7	+3.5
11	31 55.3	-1.1	18	31 30.7	-0.3
12	31 53.8	-2.0	19	31 29.4	-1.6
13	31 55.9	+0.7	July 1	31 32.2	+2.0
20	31 49.8	-1.8	3	31 32.4	+2.2
24	31 51.0	+1.4	4	31 29.9	-0.3
27	31 48.4	+0.2	5	31 32.7	+2.5
May 2	31 45.3	-0.5	8	31 29.1	-1.1
11	31 42.3	+0.7	26	31 35.3	+2.7
27	31 37.8	+1.8	30	31 31.5	-2.1
28	31 35.9	+0.3	August 1	31 31.1	-2.9
29	31 37.3	+1.9	September 13	31 49.9	-1.3
Mean Difference from Nautical Almanac by 34 observations = + 0 ^{''} .11.					

OBSERVED RIGHT ASCENSIONS AND DECLINATIONS OF THE SUN.

Date.	RIGHT ASCENSION.			DECLINATION.			
	Limb observed.	Right Ascension of Centre.	Difference from Nautical Almanac.	Limb observed.	Parallax in Declination.	Declination of Centre.	Difference from Nautical Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>		<i>"</i>	<i>° ' "</i>	<i>"</i>
Jan. 2	I. & II.	18 49 59.74	+0.02	N. & S.	+8.5	-22 57 53.1	-0.2
8	I. & II.	19 16 20.92	+0.04	N. & S.	8.5	-22 18 2.8	+5.6
9	I. & II.	19 20 42.99	+0.17	N.	8.5	-22 9 58.0	-0.5
12	II.	19 33 45.46	+0.07	S.	8.5	-21 42 51.3	-1.9
14	I. & II.	19 42 24.20	+0.07	N.	8.5	-21 22 37.6	-0.8
15	I. & II.	19 46 42.68	+0.15	S.	8.5	-21 11 53.6	-0.2
16	I. & II.	19 51 0.23	-0.02	N.	8.5	-21 0 46.9	-1.4
17	I. & II.	19 55 17.35	+0.09	S.	8.5	-20 49 12.5	+1.1
19	II.	20 3 49.27	+0.17	.....	...	.....	.....
21	I.	20 12 18.23	+0.32	.....	...	.....	.....
23	I. & II.	20 20 43.93	+0.34	N.	8.4	-19 31 55.3	+0.6
24	I. & II.	20 24 55.48	+0.25	.....	...	.....	.....
25	I. & II.	20 29 5.97	-0.07	S.	8.4	-19 3 13.1	+0.4
26	I. & II.	20 33 16.32	+0.28	N.	8.4	-18 48 20.5	+0.5
30	I. & II.	20 49 48.02	+0.21	S.	8.3	-17 45 29.5	+1.0
31	I. & II.	20 53 53.93	+0.24	.....	...	.....	.....
Feb. 1	I. & II.	20 57 58.86	+0.11	.....	...	.....	.....
2	I. & II.	21 2 3.08	+0.09	.....	...	.....	.....
5	I. & II.	21 14 11.17	+0.30	N.	8.2	-16 1 58.1	-3.0
6	I. & II.	21 18 12.08	+0.19	S.	8.2	-15 43 38.8	0.0
7	I.	21 22 12.23	+0.10	N.	8.2	-15 25 8.8	-2.6
12	I. & II.	21 42 1.73	+0.13	.....	...	.....	.....
13	I. & II.	21 45 57.42	+0.25	.....	...	.....	.....
14	II.	21 49 52.05	+0.06	.....	...	.....	.....
15	I. & II.	21 53 46.24	+0.19	S.	8.1	-12 47 53.6	+0.3
18	I. & II.	22 5 24.00	+0.17	N.	8.0	-11 45 22.0	-0.5
19	I. & II.	22 9 14.99	-0.01	S.	8.0	-11 24 7.4	+0.7
20	I. & II.	22 13 5.62	+0.16	.....	...	.....	.....
22	I. & II.	22 20 44.48	+0.13	N.	7.9	-10 19 24.3	+1.8
23	I. & II.	22 24 32.94	+0.14	S.	7.9	-9 57 31.2	+1.7
25	I. & II.	22 32 7.93	+0.09	N.	7.8	-9 13 21.9	-1.6
26	I. & II.	22 35 54.42	-0.02	S.	7.8	-8 51 0.5	+1.1
27	I. & II.	22 39 40.52	+0.07	N.	7.8	-8 28 35.4	-0.3
Mar. 1	I. & II.	22 47 10.85	+0.02	S.	7.7	-7 43 18.8	+1.6
4	I. & II.	22 58 22.85	+0.23	N.	7.6	-6 34 39.7	-0.4
6	I. & II.	23 5 48.34	+0.14	.....	...	.....	.....
12	I. & II.	23 27 56.02	+0.18	S.	7.4	-3 27 50.6	+1.5
13	I. & II.	23 31 36.06	+0.09	N.	7.3	-3 4 15.5	+0.4
19	I. & II.	23 53 31.77	+0.27	N. & S.	7.2	-0 42 7.4	+1.3
22	I. & II.	0 4 26.97	+0.26	S.	7.1	+0 28 59.3	+2.7
25	I. & II.	0 15 21.14	+0.27	S.	7.0	+1 39 50.5	+1.0
26	I. & II.	0 18 59.02	+0.24	N. & S.	6.9	+2 3 22.3	-0.4
29	I.	0 29 52.79	+0.36	.....	...	.....	.....
30	I. & II.	0 33 30.65	+0.29	N. & S.	6.8	+3 37 6.0	+1.7
April 8	I. & II.	1 6 17.38	+0.11	N. & S.	6.4	+7 3 25.8	+0.8
10	I. & II.	1 13 36.69	+0.09	.....	...	.....	.....
11	I. & II.	1 17 16.71	+0.04	N. & S.	6.3	+8 10 16.1	-1.3
12	I. & II.	1 20 57.07	+0.05	N. & S.	6.3	+8 32 20.1	+1.1
13	.....	.....	.....	N. & S.	6.2	+8 54 9.8	-2.3
20	I. & II.	1 50 32.07	+0.13	N. & S.	6.0	+11 22 56.6	+0.5
24	I. & II.	2 5 28.85	+0.17	N. & S.	5.8	+12 43 55.0	+0.8
27	I. & II.	2 16 45.72	-0.22	N. & S.	5.7	+13 42 26.9	+0.3
May 1	I. & II.	2 31 56.04	+0.03	S.	5.6	+14 57 20.6	+0.7
2	I. & II.	2 35 45.03	+0.16	N. & S.	5.5	+15 15 28.1	+0.8
7	I. & II.	2 54 57.87	+0.19	.....	...	.....	.....
10	I. & II.	3 6 36.38	+0.03	.....	...	.....	.....

Date.	RIGHT ASCENSION.			DECLINATION.			
	Limb observed.	Right Ascension of Centre.	Difference from Nautical Almanac.	Limb observed.	Parallax in Declination.	Declination of Centre.	Difference from Nautical Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>		<i>"</i>	<i>° ' "</i>	<i>"</i>
May 11	I. & II.	3 10 30.57	+0.15	N. & S.	+5.2	+17 46 42.8	-0.6
17	I. & II.	3 34 7.20	+0.15	S.	5.1	+19 14 28.7	+1.3
20	I. & II.	3 46 2.72	-0.19	N.	4.9	+19 53 56.9	-1.9
24	I. & II.	4 2 4.86	+0.14	S.	4.9	+20 41 54.1	-0.3
25	I. & II.	4 6 6.65	+0.19	N.	4.8	+20 52 57.5	-3.1
27	I. & II.	4 14 11.55	+0.14	N. & S.	4.8	+21 14 8.3	0.0
28	I. & II.	4 18 14.71	+0.10	N. & S.	4.8	+21 24 9.8	+0.4
29	I. & II.	4 22 18.32	+0.04	N. & S.	4.7	+21 33 46.7	-1.7
30	I. & II.	4 26 22.32	-0.10	N.	4.7	+21 43 5.7	+0.6
June 1	I. & II.	4 34 32.12	+0.08	N. & S.	4.7	+22 0 30.8	-0.1
3	I. & II.	4 42 43.51	+0.15	.....	...	.....	.....
4	I. & II.	4 46 49.64	+0.03	.....	...	.....	.....
5	I. & II.	4 50 56.33	+0.07	N. & S.	4.6	+22 30 44.6	-1.9
8	.....	.....	.....	S.	4.6	+22 49 22.3	+1.1
11	I. & II.	5 15 43.15	+0.12	N. & S.	4.6	+23 1 18.0	-1.5
13	I. & II.	5 24 0.80	+0.12	N.	4.5	+23 12 18.0	+1.2
14	I. & II.	5 28 9.87	+0.10	N. & S.	4.5	+23 15 37.3	-1.4
15	I. & II.	5 32 19.06	+0.05	N. & S.	4.5	+23 18 35.7	-0.2
17	I. & II.	5 40 37.82	+0.03	N. & S.	4.5	+23 23 14.7	-1.5
18	I. & II.	5 44 47.41	+0.12	N. & S.	4.5	+23 24 56.9	-2.3
19	I. & II.	5 48 56.95	+0.11	N. & S.	4.5	+23 26 14.3	-3.1
20	II.	5 53 6.26	-0.14	.....	...	.....	.....
25	I. & II.	6 13 53.88	+0.18	S.	4.5	+23 25 23.9	-2.0
28	I. & II.	6 26 21.10	+0.15	.....	...	.....	.....
29	I. & II.	6 30 30.03	+0.31	.....	...	.....	.....
July 1	I. & II.	6 38 46.79	+0.11	N. & S.	4.5	+23 9 46.3	-0.5
3	I. & II.	6 47 2.49	-0.26	N. & S.	4.6	+23 1 17.4	-1.0
4	I. & II.	6 51 10.48	+0.07	N. & S.	4.6	+22 56 26.0	-2.0
5	I. & II.	6 55 17.80	+0.04	N. & S.	4.6	+22 51 12.4	-1.0
8	I. & II.	7 7 38.10	+0.13	N. & S.	4.6	+22 33 5.8	-1.1
9	I. & II.	7 11 44.07	+0.07	N.	4.6	+22 26 15.6	-1.9
13	I. & II.	7 28 4.11	+0.12	S.	4.7	+21 55 6.8	-2.1
15	I. & II.	7 36 11.30	+0.10	.....	...	.....	.....
16	I. & II.	7 40 14.11	+0.07	.....	...	.....	.....
20	I. & II.	7 56 20.27	+0.20	.....	...	.....	.....
22	I. & II.	8 4 19.84	+0.13	.....	...	.....	.....
25	II.	8 16 14.57	-0.25	N.	4.9	+19 46 37.3	+0.3
26	I. & II.	8 20 11.90	-0.12	N. & S.	5.0	+19 33 39.0	-1.5
29	I. & II.	8 32 0.04	0.00	N.	5.0	+18 52 54.3	-0.9
30	I. & II.	8 35 54.91	+0.04	N. & S.	5.1	+18 38 39.3	-3.0
Aug. 1	I. & II.	8 43 43.04	+0.28	N. & S.	5.1	+18 9 19.9	-1.5
2	I. & II.	8 47 36.20	+0.37	.....	...	.....	.....
5	II.	8 55 11.79	+0.23	.....	...	.....	.....
7	I. & II.	9 6 52.60	+0.15	.....	...	.....	.....
8	I.	9 10 42.13	+0.11	.....	...	.....	.....
10	I.	9 18 19.73	+0.32	.....	...	.....	.....
13	I.	9 29 41.39	+0.23	.....	...	.....	.....
20	I. & II.	9 55 52.53	+0.01	.....	...	.....	.....
21	I. & II.	9 59 35.05	+0.13	.....	...	.....	.....
22	I. & II.	10 3 16.79	-0.05	.....	...	.....	.....
26	I. & II.	10 18 0.24	+0.18	.....	...	.....	.....
30	I. & II.	10 32 37.07	+0.08	.....	...	.....	.....
Sept. 3	I. & II.	10 47 8.93	+0.11	.....	...	.....	.....
6	I. & II.	10 58 0.04	+0.10	.....	...	.....	.....
9	I. & II.	11 8 49.29	+0.12	.....	...	.....	.....
10	II.	11 12 25.37	+0.15	.....	...	.....	.....

Date.	RIGHT ASCENSION.			DECLINATION.			
	Limb observed.	Right Ascension. of Centre.	Difference from Nautical Almanac.	Limb observed.	Parallax in Declination.	Declination of Centre.	Difference from Nautical Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>		<i>"</i>	<i>° ' "</i>	<i>"</i>
Sept. 11	I. & II.	11 16 1-27	+0-14	.....	...	.....	.....
12	II.	11 19 37-14	+0-24	.....	...	.....	.....
13	I. & II.	11 23 12-61	+0-06	N. & S.	+6-7	+ 3 58 4-9	-2-1
19	I. & II.	11 44 45-20	+0-07	N.	6-9	+ 1 39 7-5	-2-7
21	I. & II.	11 51 55-88	-0-06	N.	7-0	+ 0 52 29-6	-1-3
23	I. & II.	11 59 6-98	-0-04	S.	7-1	+ 0 5 43-9	-1-6
24	I. & II.	12 2 42-51	-0-22	N.	7-1	- 0 17 39-9	-1-2
25	I. & II.	12 6 18-48	-0-09	.....	...	.....	.....
26	I. & II.	12 9 54-66	+0-07	S.	7-2	- 1 4 29-1	-0-6
30	I.	12 24 21-01	+0-20	.....	...	.....	.....
Oct. 2	I. & II.	12 31 35-42	-0-08	S.	7-4	- 3 24 46-0	+0-4
3	I. & II.	12 35 13-16	-0-16	N.	7-4	- 3 48 5-8	-1-8
5	I. & II.	12 42 29-94	-0-01	S.	7-5	- 4 34 32-5	-1-2
7	I. & II.	12 49 48-06	-0-03	N.	7-5	- 5 20 45-3	0-0
9	I. & II.	12 57 7-90	+0-06	S.	7-6	- 6 6 41-7	+1-4
10	I.	13 0 48-38	+0-02	N.	7-6	- 6 29 34-8	+0-1
11	I. & II.	13 4 29-05	-0-30	S.	7-6	- 6 52 21-2	+0-2
15	I. & II.	13 19 18-30	+0-15	N.	7-7	- 8 22 26-7	+0-7
17	I.	13 26 45-77	+0-08	.....	...	.....	.....
18	I. & II.	13 30 30-28	-0-04	S.	7-8	- 9 28 47-5	0-0
19	I. & II.	13 34 15-48	-0-05	N.	7-8	- 9 50 38-3	-0-2
21	I.	13 41 47-54	-0-26	.....	...	.....	.....
25	I. & II.	13 57 0-27	-0-06	S.	8-0	-11 58 26-3	+0-4
28	I. & II.	14 8 32-40	+0-12	N.	8-0	-13 0 0-6	-1-6
30	I. & II.	14 16 17-29	-0-10	S.	8-1	-13 40 1-0	-0-3
Nov. 9	I. & II.	14 55 52-06	+0-14	N.	8-2	-16 46 8-1	-0-5
11	I. & II.	15 3 56-53	-0-31	S.	8-3	-17 20 9-4	-0-8
12	I. & II.	15 8 0-41	-0-15	N.	8-3	-17 36 46-5	-4-2
15	I.	15 20 16-83	+0-14	.....	...	.....	.....
19	I. & II.	15 36 49-57	-0-19	.....	...	.....	.....
20	I. & II.	15 41 0-12	+0-03	S.	8-4	-19 37 37-7	+0-2
23	I. & II.	15 53 35-90	-0-03	N.	8-4	-20 17 15-8	+0-6
27	I. & II.	16 10 34-74	-0-04	S.	8-5	-21 4 52-4	+0-6
Dec. 6	I. & II.	16 49 29-06	+0-20	N.	8-5	-22 28 23-5	-3-1
7	I. & II.	16 53 51-14	-0-09	S.	8-5	-22 35 27-7	+0-7
19	II.	17 46 49-68	+0-06	.....	...	.....	.....
21	I. & II.	17 55 42-55	+0-01	N.	8-5	-23 27 30-2	+0-1
23	I. & II.	18 4 35-71	+0-01	S.	8-6	-23 27 30-6	-1-8
25	I. & II.	18 13 28-87	+0-02	N.	8-5	-23 25 33-4	+0-4
26	I. & II.	18 17 55-36	0-00	S.	8-6	-23 23 51-8	+2-1
28	I. & II.	18 26 48-04	-0-03	N.	8-5	-23 19 8-2	+1-3

Date.	RIGHT ASCENSION.			DECLINATION.				
	Limb observed.	Right Ascension of Centre.	Difference from Naut. Almanac.	Limb observed.	Parallax in Declination.	Semidiameter.	Declination of Centre.	Difference from Naut. Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>		<i>' "</i>	<i>' "</i>	<i>° ' "</i>	<i>"</i>
Jan. 7	I. (a)	13 16 25.76	+0.21	S.	+49 52.8	+14 48.4	-10 17 41.5	+ 1.0
	II.	13 16 25.72	+0.17	.....	.....	.....	.....	.....
8	I. (a)	14 1 43.70	+0.21	S.	51 48.9	+14 51.9	-15 34 34.6	- 0.2
	II.	14 1 43.66	+0.17	.....	.....	.....	.....	.....
19	I.	23 31 10.29	-0.79	.....	.....	.....	.....	.....
20	I.	0 23 7.36	-0.50	S.	47 34.6	+16 13.4	+ 3 29 30.3	- 6.0
21	I.	1 15 34.82	-0.15	S.	42 50.8	+16 10.6	+10 19 31.7	- 7.6
24	I.	4 7 33.43	-0.40	S.	29 46.0	+15 55.7	+25 47 28.8	- 1.3
26	I.	6 14 27.11	-0.33	N.	26 26.8	-15 41.4	+28 29 43.2	- 2.7
27	I.	7 16 44.10	-0.09	N.	27 26.8	-15 33.1	+27 6 23.1	- 2.8
28	I.	8 15 32.25	-0.13	N.	29 44.9	-15 24.5	+24 7 54.5	- 1.7
29	II.	9 9 59.61	-0.12	N.	32 54.4	-15 15.7	+19 55 28.2	+ 0.4
30	II.	10 0 14.53	-0.20	.....	.....	.....	.....	.....
Feb. 6	II.	15 18 38.01	+0.17	S.	53 50.6	+14 58.0	-22 51 16.4	- 1.9
18	I.	1 51 25.67	-0.78	S.	39 50.7	+16 18.3	+14 45 45.2	-10.1
19	I.	2 48 48.29	-0.71	S.	34 49.1	+16 9.7	+20 30 49.7	- 8.7
22	I.	5 54 45.40	-0.91	S.	26 41.4	+15 39.7	+28 41 45.0	- 0.7
	.....	.....	.....	N.	26 13.2	-15 39.7	+28 41 43.6	- 2.1
23	I.	6 56 52.88	-0.80	N.	26 42.2	-15 30.2	+27 51 1.4	- 0.4
24	I.	7 55 57.89	-0.47	N.	28 35.4	-15 21.4	+25 22 49.4	+ 1.9
25	I.	8 51 1.15	-0.35	N.	31 28.6	-15 13.2	+21 35 32.0	+ 0.5
26	I.	9 42 0.58	-0.16	N.	34 55.8	-15 5.7	+16 49 54.5	+ 0.3
27	I.	10 29 32.52	-0.22	N.	38 33.6	-14 59.0	+11 25 19.3	+ 2.3
28	II.	11 14 33.30	-0.47	S.	42 21.3	+14 53.4	+ 5 38 26.6	+ 1.1
Mar. 1	II.	11 58 6.41	-0.55	.....	.....	.....	.....	.....
21	I.	5 34 26.79	-0.52	S.	27 4.7	+15 51.1	+28 37 50.6	- 3.9
22	I.	6 38 1.08	-0.59	N.	26 29.0	-15 37.5	+28 20 3.3	- 2.8
23	I.	7 38 24.81	-0.74	N.	27 54.2	-15 25.3	+26 19 6.2	0.0
24	I.	8 34 32.37	-0.56	N.	30 27.2	-15 14.7	+22 54 11.7	+ 1.4
25	I.	9 26 18.77	-0.48	N.	33 42.1	-15 5.7	+18 26 28.7	+ 2.5
29	I.	12 26 19.37	+0.06	S.	47 7.7	+14 45.2	- 4 6 42.0	+ 0.9
	II.	12 26 19.22	-0.09	.....	.....	.....	.....	.....
30	II.	13 9 46.34	-0.05	S.	49 26.1	+14 43.8	- 9 48 44.4	+ 2.1
April 18	I.	6 13 47.36	-0.16	S.	27 17.4	+15 56.7	+28 34 41.5	- 1.9
19	I.	7 17 18.94	-0.18	.....	.....	.....	.....	.....
21	I.	9 9 58.13	-0.75	N.	32 51.4	-15 13.5	+19 53 7.5	+ 0.9
24	I.	11 29 20.19	-0.20	N.	43 4.0	-14 49.3	+ 3 36 21.5	+ 4.9
26	I.	12 55 23.42	-0.31	N.	48 31.3	-14 43.7	- 7 58 46.3	+ 1.1
27	I.	13 39 41.81	+0.05	N.	50 30.7	-14 43.4	-13 25 46.9	+ 2.1
	.....	.....	.....	S.	50 40.3	+14 43.4	-13 25 49.6	- 0.6
May 6	II.	21 48 49.92	-0.62	N.	55 23.7	-15 54.2	-15 54 59.0	- 9.0
19	.....	.....	.....	N.	35 29.7	-15 15.7	+16 36 8.0	- 2.0
21	I.	11 14 12.25	-0.24	N.	42 16.7	-14 55.5	+ 5 25 57.0	+ 3.9
22	I.	11 57 33.68	-0.20	.....	.....	.....	.....	.....
23	I.	12 40 33.99	-0.37	N.	47 5.30	-14 46.0	- 6 10 54.3	+ 5.2
24	I.	13 24 23.41	+0.04	.....	.....	.....	.....	.....
25	I.	14 10 4.29	+0.11	.....	.....	.....	.....	.....
27	I.	15 50 15.06	+0.34	N.	53 45.9	-14 52.7	-24 54 30.3	- 2.3
	.....	.....	.....	S.	53 50.1	+14 52.7	-24 54 30.2	- 2.2
June 4	II.	23 14 51.98	-0.76	.....	.....	.....	.....	.....
15	I.	9 18 49.63	-0.97	.....	.....	.....	.....	.....

(a) Dark or unenlightened Limb.

Date.	RIGHT ASCENSION.			DECLINATION.				
	Limb observed.	Right Ascension of Centre.	Difference from Naut. Almanac.	Limb observed.	Parallax in Declination.	Semidiameter.	Declination of Centre.	Difference from Naut. Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>		<i>' "</i>	<i>' "</i>	<i>° ' "</i>	<i>"</i>
June 16	I.	10 9 26.67	-0.70	N.	+38 4.0	-15 17.7	+13 14 46.3	- 0.3
17	I.	10 56 17.57	-0.57	N.	41 29.4	-15 6.2	+ 7 29 23.1	- 1.9
19	I.	12 24 9.45	-0.35	N.	47 17.1	-14 51.0	- 4 16 7.3	+ 0.8
20	I.	13 7 46.19	-0.37	.....	.....	.....	.....	.....
July 4	II.	1 34 11.36	-0.51	.....	.....	.....	.....	.....
15	I.	11 21 44.36	-0.78	N.	43 42.5	-15 5.9	+ 3 53 15.6	+ 0.6
21	.....	.....	.....	N.	54 9.5	-14 57.2	-25 48 4.9	- 2.2
Aug. 2	II.	3 11 42.20	-0.88	.....	.....	.....	.....	.....
3	II.	4 14 17.49	-0.66	.....	.....	.....	.....	.....
18	I.	16 34 10.29	-0.02	.....	.....	.....	.....	.....
20	I.	18 30 31.71	+0.10	.....	.....	.....	.....	.....
26	II.	0 5 45.75	-0.63	.....	.....	.....	.....	.....
Sept. 1	II.	6 5 1.54	-1.08	.....	.....	.....	.....	.....
2	II.	7 8 41.24	-1.11	.....	.....	.....	.....	.....
13	I.	15 19 27.94	-0.19	.....	.....	.....	.....	.....
19	.....	.....	.....	S.	56 19.8	+15 47.7	-20 20 39.4	- 0.5
20	I.	21 53 9.01	+0.08	S.	55 44.3	+16 3.1	-14 49 32.3	- 0.6
21	I.	22 47 2.63	+0.12	S.	54 3.4	+16 16.9	- 8 19 23.6	+ 1.7
22	I.	23 40 29.11	-0.06	N.	50 46.6	-16 27.7	- 1 12 5.4	- 2.7
.....	.....	.....	.....	S.	51 5.4	+16 27.7	- 1 12 3.5	- 0.8
23	II.	0 34 38.09	-0.63	N.	46 31.0	-16 34.4	+ 6 6 55.0	- 5.9
29	II.	6 49 46.67	-1.34	S.	27 53.0	+15 51.1	+27 44 33.3	+ 2.5
Oct. 17	I.	21 26 38.39	-0.05	S.	55 26.7	+15 44.4	-17 32 20.1	- 7.5
18	I.	22 19 44.15	-0.03	S.	54 30.5	+16 0.9	-11 39 0.0	- 5.8
19	I.	23 12 21.10	+0.19	S.	52 28.9	+16 16.9	- 4 56 33.0	- 5.0
20	I.	0 5 37.01	+0.21	S.	49 12.2	+16 30.5	+ 2 14 51.0	- 5.1
29	II.	9 23 49.00	-0.87	S.	35 25.4	+15 26.2	+17 44 20.7	+ 7.1
Nov. 16	I.	23 38 50.52	-0.54	S.	50 9.3	+16 10.0	- 1 11 32.5	-11.3
17	I.	0 31 24.41	-0.50	S.	46 36.5	+16 24.6	+ 5 50 12.2	- 9.0
19	I.	2 27 2.30	-0.54	S.	37 20.5	+16 43.7	+19 2 29.5	- 8.7
.....	.....	.....	.....	N.	36 51.3	-16 43.7	+19 2 32.3	- 5.9
21	II.	4 41 33.65	-0.76	N.	29 17.4	-16 41.4	+27 17 41.3	- 4.9
Dec. 13	I.	23 18 58.19	-0.06	.....	.....	.....	.....	.....
15	I.	1 0 58.11	-0.72	.....	.....	.....	.....	.....
20	.....	.....	.....	N.	28 25.8	-16 30.1	+27 51 18.1	- 2.1
21	II.	7 32 37.25	-0.91	S.	30 43.3	+16 19.2	+25 33 46.9	+ 1.3
.....	.....	.....	.....	N.	30 13.9	-16 19.2	+25 33 45.0	- 0.6
26	II.	11 56 10.38	-0.09	.....	.....	.....	.....	.....
27	I. (a)	12 40 38.72	-0.18	S.	49 14.3	+14 57.1	- 7 25 21.9	+ 3.3
.....	II.	12 40 38.54	-0.36	.....	.....	.....	.....	.....
28	I. (a)	13 25 28.17	-0.23	S.	50 53.9	+14 50.3	-12 54 21.9	+ 1.3
.....	II.	13 25 28.19	-0.21	.....	.....	.....	.....	.....
(a) Dark or unenlightened Limb.								

Date.	RIGHT ASCENSION.			DECLINATION.		
	Limb observed.	Right Ascension of Centre.	Difference from Nautical Almanac.	Parallax in Declination.	Declination of Centre.	Difference from Nautical Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>	<i>"</i>	<i>° ' "</i>	<i>"</i>
Mar. 19	I.	0 16 31.66	-0.02	+5.4	+ 1 0 12.9	-3.9
23	I.	0 44 57.47	-0.14	5.3	+ 4 48 26.9	-3.4
30	I.	1 31 37.65	+0.09	5.5	+11 2 22.7	-4.0
April 8	I.	2 15 43.40	+0.17	6.3	+16 32 53.2	+0.1
10	I.	2 21 52.33	+0.44	6.5	+17 14 6.1	-2.4
May 19	...	.....	.....	8.3	+ 9 46 24.8	+5.1
22	II.	2 22 49.29	+0.29	7.7	+10 29 10.4	+3.0
23	...	.....	.....	7.6	+10 46 56.1	+1.9
26	II.	2 37 36.05	+0.43	...	.....	.....
27	II.	2 41 48.08	+0.20	...	.....	.....
28	...	.....	.....	6.6	+12 38 6.3	+4.7
29	II.	2 50 48.53	+0.07	6.4	+13 4 6.3	+3.2
31	II.	3 0 37.19	+0.03	6.0	+13 59 13.8	+4.1
June 7	II.	3 41 25.82	+0.05	4.9	+17 33 36.8	+0.2
12	II.	4 17 7.07	-0.24	4.2	+20 10 47.2	-1.5
13	II.	4 24 56.41	-0.15	4.1	+20 40 43.3	-2.0
14	II.	4 32 59.09	-0.25	4.0	+21 9 46.0	-1.4
16	II.	4 49 43.98	-0.32	3.8	+22 4 14.4	-4.8
17	II.	4 58 25.42	-0.17	3.7	+22 29 20.2	-4.4
18	II.	5 7 18.06	-0.35	...	.....	.....
July 1	...	.....	.....	3.4	+24 22 6.4	-1.2
3	I.	7 19 25.77	-0.56	3.4	+23 59 2.1	-1.6
4	I.	7 28 25.79	-0.46	3.5	+23 43 50.5	-1.9
5	I.	7 37 15.79	-0.62	3.5	+23 26 24.4	-0.8
8	I.	8 2 43.04	-0.50	3.7	+22 21 52.0	-0.6
13	I.	8 41 23.54	-0.42	4.1	+20 2 1.9	-0.1
26	...	.....	.....	5.6	+12 24 34.6	+2.5
30	I.	10 19 39.87	-0.09	6.2	+ 9 58 50.1	+3.6
Aug. 8	I.	10 52 5.72	+0.11	...	.....	.....
Sept. 12	II.	10 22 25.79	+0.07	7.7	+ 9 29 56.4	-5.2
20	II.	10 49 26.61	-0.23	6.1	+ 8 50 55.8	-2.7
22	II.	11 0 9.54	-0.38	5.9	+ 8 2 41.1	-2.3
24	II.	11 11 48.64	-0.46	5.7	+ 7 2 22.5	-1.7
25	II.	11 17 53.67	-0.41	5.6	+ 6 28 23.9	-0.5
29	II.	11 43 13.42	-0.40	...	.....	.....
Oct. 1	II.	11 56 10.18	-0.39	5.4	+ 2 27 24.6	+0.6
4	II.	12 15 36.46	-0.43	5.3	+ 0 13 15.8	+1.7
28	I.	14 38 30.58	+0.24	5.7	-16 0 10.5	+4.3
Nov. 20	I.	17 0 25.90	+0.10	7.0	-25 11 9.8	+0.7
Dec. 27	II.	17 9 16.19	+0.93	...	.....	.....

OBSERVED RIGHT ASCENSIONS AND DECLINATIONS OF VENUS.

Date.	RIGHT ASCENSION.			DECLINATION.			
	Limb observed.	Right Ascension of Centre.	Difference from Nautical Almanac.	Limb observed.	Parallax in Declination.	Declination of Centre.	Difference from Nautical Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>		<i>"</i>	<i>° ' "</i>	<i>"</i>
Jan. 9	I.	19 43 49.05	+0.15	.....	+4.9	-22 22 31.0	+1.2
12	I.	19 59 53.27	+0.11	.....	.....	.....	.....
16	I.	20 21 4.09	+0.11	.....	4.9	-20 46 1.6	+1.0
19	I.	20 36 44.98	+0.18	.....	.....	.....	.....
26	I.	21 12 35.88	+0.08	.....	4.9	-17 37 3.9	+0.2
Feb. 2	I.	21 47 23.55	-0.03	.....	.....	.....	.....
5	I.	22 2 0.03	+0.27	.....	.....	.....	.....
13	I.	22 40 7.39	+0.07	.....	.....	.....	.....
15	I.	22 49 29.22	+0.01	.....	4.7	-9 3 27.8	-1.8
18	I.	23 3 25.66	+0.07	.....	4.7	-7 35 43.9	-3.9
19	I.	23 8 2.72	-0.09	.....	4.7	-7 6 3.3	-3.3
23	I.	23 26 24.59	-0.11	.....	.....	.....	.....
25	I.	23 35 31.94	-0.09	.....	4.6	-4 4 38.4	-3.6
27	I.	23 44 37.20	-0.17	.....	4.5	-3 3 10.0	-3.6
Mar. 2	I.	23 58 12.46	-0.01	.....	.....	.....	.....
4	I.	0 7 14.33	-0.08	.....	4.5	-0 28 13.3	-3.1
6	I.	0 16 15.50	-0.13	.....	.....	.....	.....
9	I.	0 29 46.81	-0.08	.....	.....	.....	.....
19	...	.....	.....	.....	4.1	+7 13 57.5	-5.0
22	I.	1 28 40.04	+0.05	N. & S.	4.1	+8 43 21.1	-6.4
23	I.	1 33 14.47	-0.04	N. & S.	4.1	+9 12 48.4	-4.5
25	I.	1 42 25.20	-0.08	N. & S.	4.0	+10 10 59.0	-5.7
26	...	.....	.....	.....	4.0	+10 39 43.4	-6.2
27	I.	1 51 38.67	+0.05	.....	.....	.....	.....
30	I.	2 5 33.91	-0.12	N. & S.	3.9	+12 32 6.6	-6.0
April 8	I.	2 48 6.20	-0.32	N. & S.	3.7	+16 26 23.5	-3.4
10	I.	2 57 44.19	-0.17	N. & S.	3.7	+17 14 14.1	-5.6
11	I.	3 2 34.65	-0.17	.....	3.6	+17 37 33.3	-4.3
12	I.	3 7 26.05	-0.27	N. & S.	3.7	+18 0 24.3	-4.5
13	...	.....	.....	N. & S.	3.6	+18 22 47.5	-4.9
18	I.	3 36 57.09	-0.12	N. & S.	3.5	+20 7 30.3	-3.7
20	...	.....	.....	N. & S.	3.5	+20 45 44.9	-5.1
23	I.	4 2 0.56	-0.23	N. & S.	3.5	+21 39 1.2	-3.5
24	I.	4 7 4.22	-0.13	N. & S.	3.4	+21 55 37.2	-3.7
27	...	.....	.....	.....	3.4	+22 41 50.1	-3.9
May 7	I.	5 14 0.19	-0.26	.....	.....	.....	.....
10	I.	5 29 39.72	-0.30	N. & S.	3.4	+24 55 19.4	-1.7
11	I.	5 34 53.42	-0.25	N. & S.	3.4	+25 0 49.6	-2.0
22	...	.....	.....	N. & S.	3.6	+25 14 50.1	-0.2
25	I.	6 47 47.23	-0.16	.....	.....	.....	.....
27	I.	6 58 3.34	+0.05	.....	.....	.....	.....
28	I.	7 3 9.70	-0.10	.....	.....	.....	.....
29	I.	7 8 15.23	-0.20	.....	3.8	+24 39 40.1	+1.8
30	I.	7 13 19.83	-0.12	.....	3.9	+24 31 57.9	+3.7
31	I.	7 18 23.32	-0.02	.....	3.9	+24 23 33.1	+2.4
June 1	I.	7 23 25.54	-0.02	.....	.....	.....	.....
3	I.	7 33 26.45	+0.11	.....	4.1	+23 54 30.9	+3.2
5	I.	7 43 21.82	-0.10	.....	4.2	+23 31 58.6	+2.3
11	I.	8 12 34.02	-0.10	.....	4.5	+22 10 3.8	+3.9
13	I.	8 22 5.64	-0.01	.....	4.6	+21 38 13.6	+4.0

A correction of 0".1 applied to observations of North L. from March 22 to April 24, for defect of illumination.

Date.	RIGHT ASCENSION.			DECLINATION.			
	Limb observed.	Right Ascension of Centre.	Difference from Nautical Almanac.	Limb observed.	Parallax in Declination.	Declination of Centre.	Difference from Nautical Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>		<i>"</i>	<i>° ' "</i>	<i>"</i>
June 14	I.	8 26 48.98	+0.01	.....	+4.7	+21 21 28.3	+ 1.9
15	I.	8 31 30.53	-0.01	.....	.....	.....	.....
17	I.	8 40 48.44	-0.05	.....	.....	.....	.....
18	I.	8 45 24.93	+0.13	.....	4.8	+20 9 34.3	+ 4.6
19	I.	8 49 59.37	+0.03	.....	5.0	+19 50 21.4	+ 3.4
July 3	I.	9 50 48.63	+0.03	.....	.....	.....	.....
4	I.	9 54 55.37	+0.08	.....	6.4	+14 14 14.4	+ 5.5
8	I.	10 11 3.83	+0.12	N. & S.	6.9	+12 32 21.5	+ 5.7
10	I.	10 18 57.26	+0.34	N.	7.2	+11 39 58.0	+ 5.0
13	I.	10 30 33.37	+0.34	S.	7.6	+10 19 50.0	+ 2.8
15	I.	10 38 8.13	+0.25	N.	7.8	+ 9 25 36.0	+ 5.1
27	I.	11 20 59.03	+0.36	.....	.....	.....	.....
29	I.	11 27 40.18	+0.34	N.	10.0	+ 2 54 49.6	+ 4.4
30	I.	11 30 57.65	+0.28	N. & S.	10.2	+ 2 26 39.2	+ 2.1
Aug. 1	I.	11 37 26.51	+0.29	N.	10.6	+ 1 30 32.4	+ 5.3
5	I.	11 49 58.50	+0.33	.....	.....	.....	.....
21	I.	12 33 12.12	+0.34	.....	.....	.....	.....
26	I.	12 43 43.45	+0.37	.....	.....	.....	.....
27	I.	12 45 36.38	+0.27	.....	.....	.....	.....
Sept. 3	I.	12 56 22.91	+0.35	.....	.....	.....	.....
13	...	.....	.....	N.	23.1	-14 17 32.3	- 9.2
18	I.	13 1 0.37	+0.56	.....	.....	.....	.....
21	I.	12 58 18.18	+0.45	N.	26.0	-14 51 53.7	-11.5
23	I.	12 55 50.03	+0.35	N.	26.6	-14 47 3.7	-14.8
25	I.	12 52 52.45	+0.14	.....	.....	.....	.....
26	...	.....	.....	N.	27.5	-14 28 46.0	-17.5
Oct. 4	II.	12 33 21.14	+0.72	N.	28.6	-12 18 47.4	-24.1
9	II.	12 23 17.78	+0.64	N.	28.0	-10 31 21.6	-23.9
10	II.	12 21 28.41	+0.36	N.	27.9	-10 8 30.9	-24.0
15	II.	12 13 57.48	+0.71	S.	26.6	- 8 14 34.2	-25.0
16	II.	12 12 49.49	+0.62	N. & S.	26.2	- 7 52 40.0	-24.2
17	II.	12 11 49.66	+0.37	N. & S.	25.9	- 7 31 23.2	-27.3
18	II.	12 10 58.63	+0.35	N. & S.	25.5	- 7 10 40.7	-25.5
20	II.	12 9 43.09	+0.41	S.	24.8	- 6 31 38.3	-27.4
24	II.	12 8 59.90	+0.36	.....	.....	.....	.....

Date.	RIGHT ASCENSION.			DECLINATION.			
	Limb observed.	Right Ascension of Centre.	Difference from Nautical Almanac.	Limb observed.	Parallax in Declination.	Declination of Centre.	Difference from Nautical Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>		<i>"</i>	<i>° ' "</i>	<i>"</i>
Feb. 27	I. & II.	11 49 59.15	-0.07	N.	+9.6	+5 24 42.6	-2.3
28	I. & II.	11 48 45.72	-0.13	S.	9.6	+5 32 44.8	-4.2
Mar. 1	I. & II.	11 47 30.40	-0.12	.....	...	.....	.....
2	I. & II.	11 46 13.38	+0.08	S.	9.6	+5 49 15.1	-2.0
5	I. & II.	11 42 11.23	-0.36	N.	9.6	+6 14 35.2	-0.5
6	I. & II.	11 40 47.96	-0.16	S.	9.7	+6 23 4.1	-3.6
9	I. & II.	11 36 31.02	+0.10	.....	...	.....	.....
12	I. & II.	11 32 6.92	-0.01	S.	9.6	+7 14 6.6	-3.8
18	I. & II.	11 23 16.74	+0.07	S.	9.5	+8 2 2.9	-3.1
21	I. & II.	11 18 59.70	-0.01	N. & S.	9.5	+8 23 44.7	-0.6
23	I. & II.	11 16 14.34	-0.02	N. & S.	9.4	+8 37 5.0	+0.5
25	I. & II.	11 13 35.06	-0.05	N. & S.	9.3	+8 49 23.7	0.0
29	I. & II.	11 8 38.92	+0.08	N. & S.	9.1	+9 10 48.5	+1.6
April 8	I. & II.	10 59 3.21	+0.10	N. & S.	8.6	+9 43 26.4	+0.4
9	I. & II.	10 58 20.58	+0.22	.....	...	.....	.....
10	I. & II.	10 57 40.66	+0.18	.....	8.4	+9 46 14.8	-0.3
13	.....	.....	.....	.....	8.3	+9 48 9.9	+0.5
17	I. & II.	10 54 23.94	+0.33	N. & S.	8.0	+9 46 27.7	+1.8
18	I. & II.	10 54 7.64	+0.34	.....	...	.....	.....
19	I. & II.	10 53 54.21	+0.31	.....	...	.....	.....
20	I. & II.	10 53 43.84	+0.43	.....	...	.....	.....
24	I. & II.	10 53 30.24	+0.41	.....	...	.....	.....
26	I. & II.	10 53 39.80	+0.19	.....	7.5	+9 25 56.4	+2.9
29	I. & II.	10 54 14.33	+0.26	.....	...	.....	.....
May 1	I. & II.	10 54 49.78	-0.06	.....	...	.....	.....
2	I. & II.	10 55 11.72	+0.30	.....	7.2	+9 0 42.6	+0.2
6	I. & II.	10 57 1.74	+0.22	.....	7.0	+8 39 25.6	+3.4
7	I. & II.	10 57 35.15	+0.36	.....	7.0	+8 33 32.2	+1.9
9	I. & II.	10 58 48.27	+0.30	.....	6.9	+8 21 10.7	+1.4
11	I. & II.	11 0 10.07	+0.30	.....	...	.....	.....
13	I. & II.	11 1 40.05	+0.19	.....	6.7	+7 54 3.8	0.0
16	I. & II.	11 4 10.08	+0.21	.....	...	.....	.....
20	I. & II.	11 7 56.14	+0.20	.....	...	.....	.....
21	I. & II.	11 8 57.56	+0.72	.....	...	.....	.....
22	I. & II.	11 9 59.98	+0.79	.....	...	.....	.....
23	I. & II.	11 11 3.95	+0.34	.....	...	.....	.....
24	I. & II.	11 12 9.80	+0.41	.....	...	.....	.....
25	I. & II.	11 13 17.17	+0.43	.....	...	.....	.....
27	I. & II.	11 15 36.46	+0.48	.....	...	.....	.....
28	I. & II.	11 16 48.20	+0.41	.....	...	.....	.....
29	I. & II.	11 18 1.30	+0.28	.....	...	.....	.....
30	I.	11 19 15.94	+0.28	.....	...	.....	.....
June 1	I. & II.	11 21 49.34	+0.33	.....	...	.....	.....
5	I.	11 27 11.67	+0.39	.....	...	.....	.....
7	I.	11 30 0.20	+0.34	.....	...	.....	.....
8	I.	11 31 26.29	+0.33	.....	...	.....	.....
14	I.	11 40 26.71	+0.35	.....	...	.....	.....
15	I.	11 42 0.59	+0.38	.....	...	.....	.....
17	I.	11 45 11.32	+0.34	.....	...	.....	.....
19	I.	11 48 25.94	+0.25	.....	5.7	+1 46 22.0	+3.3
20	I.	11 50 4.84	+0.36	.....	...	.....	.....

From April 8 correction for defect of illumination applied to observations of R. A.

OBSERVED RIGHT ASCENSIONS AND DECLINATIONS OF MARS.

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Date.	RIGHT ASCENSION.			DECLINATION.			
	Limb observed.	Right Ascension of Centre.	Difference from Nautical Almanac.	Limb observed.	Parallax in Declination.	Declination of Centre.	Difference from Nautical Almanac.
1839, July 3	I.	<i>h. m. s.</i> 12 12 48.69	<i>s.</i> +0.23	.....	" ...	<i>° ' "</i> .....	" .....
4	I.	12 14 39.56	+0.42	.....	...	.....	.....
8	I.	12 22 10.09	+0.39	.....	...	.....	.....
27	I.	13 0 31.64	+0.36	.....	...	.....	.....
Aug. 8	I.	13 26 54.63	+0.24	.....	...	.....	.....

OBSERVED RIGHT ASCENSIONS AND DECLINATIONS OF VESTA.

Date.	RIGHT ASCENSION.		DECLINATION.		
	Right Ascension.	Difference from Nautical Almanac.	Parallax in Declination.	Declination.	Difference from Nautical Almanac.
1839, Jan. 2	<i>h. m. s.</i> 6 27 17.08	<i>s.</i> -0.14	" +3.0	<i>° ' "</i> +22 19 32.5	" +19.8
5	6 23 57.50	+0.04	3.0	+22 30 12.8	+19.8
7	6 21 46.60	-0.15	...	.....	.....
8	6 20 42.08	-0.30	3.0	+22 40 38.2	+21.6
11	6 17 34.10	-0.12	2.9	+22 50 41.1	+19.6
14	6 14 34.81	-0.29	2.9	+23 0 23.7	+18.1
15	6 13 37.52	-0.20	2.9	+23 3 35.9	+20.2
16	6 12 41.26	-0.37	...	.....	.....
17	.....	.....	2.9	+23 9 47.5	+19.2
19	6 10 1.43	-0.27	...	.....	.....
21	6 8 22.29	-0.30	2.8	+23 21 43.1	+18.5
22	6 7 35.23	-0.20	...	.....	.....
23	6 6 49.65	-0.29	2.8	+23 27 26.5	+18.5
26	6 4 43.52	-0.30	...	.....	.....
28	6 3 28.33	-0.30	2.7	+23 41 3.1	+16.6
29	6 2 53.50	.....	2.7	+23 43 40.4	.....
30	6 2 20.51	.....	...	.....	.....
Feb. 6	5 59 23.71	.....	2.6	+24 3 22.5	.....
11	5 58 16.47	.....	...	.....	.....
12	5 58 9.01	.....	...	.....	.....
14	5 58 0.07	.....	...	.....	.....
16	5 57 58.83	.....	...	.....	.....
18	5 58 5.62	.....	...	.....	.....
22	.....	.....	2.3	+24 37 11.3	.....
23	5 58 44.98	.....	2.3	+24 39 3.9	.....
25	5 59 26.46	.....	2.3	+24 42 44.3	.....
27	6 0 9.12	.....	2.2	+24 46 18.7	.....
Mar. 2	6 1 22.79	.....	...	.....	.....
9	6 5 12.63	.....	...	.....	.....
12	6 7 14.70	.....	...	.....	.....

OBSERVED RIGHT ASCENSIONS AND DECLINATIONS OF JUNO.

Date.	RIGHT ASCENSION.		DECLINATION.		
	Right Ascension.	Difference from Nautical Almanac.	Parallax in Declination.	Declination.	Difference from Nautical Almanac.
1839,	<i>h. m. s.</i>	<i>s.</i>	<i>"</i>	<i>° ' "</i>	<i>"</i>
Sept. 23	1 35 51.03	-1.58	+6.2	+0 33 3.3	-17.7
28	1 33 53.84	-1.73	6.4	-0 34 14.0	-18.2
Oct. 2	1 31 57.41	-1.70	6.5	-1 29 21.9	-15.5
4	1 30 52.62	-1.75	6.7	-1 57 6.3	-16.0
5	1 30 18.72	-1.86	6.7	-2 10 58.4	-17.1
8	1 28 32.54	-1.95	6.8	-2 52 12.4	-13.8
10	1 27 18.74	-1.79	6.9	-3 19 24.3	-16.9
12	1 26 2.80	-1.92	6.9	-3 46 4.4	-15.2
15	1 24 6.98	-1.96	6.9	-4 24 58.5	-13.7
17	1 22 49.16	-2.14	7.0	-4 50 0.9	-13.9
19	1 21 31.74	-2.29	7.0	-5 14 10.2	-12.4
Nov. 16	1 9 23.01	.....	6.6	-8 40 41.3	.....
17	1 9 17.38	.....	6.5	-8 42 50.9	.....
19	1 9 11.45	.....	6.5	-8 46 2.6	.....
25	1 9 36.50	.....	...	.....	.....
Dec. 24	1 26 14.22	.....	...	.....	.....
27	1 29 10.96	.....	...	.....	.....
28	1 30 12.45	.....	...	.....	.....

OBSERVED RIGHT ASCENSIONS AND DECLINATIONS OF PALLAS.

Date.	RIGHT ASCENSION.		DECLINATION.		
	Right Ascension.	Difference from Nautical Almanac.	Parallax in Declination.	Declination.	Difference from Nautical Almanac.
1839,	<i>h. m. s.</i>	<i>s.</i>	<i>"</i>	<i>° ' "</i>	<i>"</i>
Mar. 18	13 20 58.20	-22.60	+4.2	+ 9 48 14.4	+ 4.6
21	13 19 10.30	-22.67	4.2	+10 53 43.7	+ 3.8
25	13 16 33.39	-22.93	4.1	+12 19 14.8	+ 4.8
27	13 15 10.65	-22.88	...	.....	.....
29	13 13 45.38	-23.01	3.9	+13 41 37.1	.....
April 8	13 6 21.74	-23.04	3.6	+16 47 43.9	+ 3.7
9	13 5 37.38	-22.92	...	.....	+ 1.3
10	13 4 53.15	-22.92	3.5	+17 20 45.1	+ 0.6
17	12 59 56.38	-22.19	...	.....	.....
18	12 59 16.40	-22.13	3.2	+19 16 34.0	- 2.3
19	12 58 37.21	-22.06	...	.....	.....
20	12 57 58.95	-21.89	...	.....	.....
30	12 52 30.28	-21.05	2.9	+21 19 9.5	-12.2
May 2	12 51 38.77	.....	2.9	+21 33 48.1	.....
6	12 50 9.89	.....	2.7	+21 58 19.2	.....
7	12 49 51.17	.....	...	.....	.....
9	.....	.....	2.7	+22 12 45.0	.....
10	12 49 2.82	.....	...	.....	.....
11	12 48 49.25	.....	2.6	+22 20 34.8	.....
13	12 48 26.62	.....	2.6	+22 26 59.6	.....
16	12 48 3.22	.....	2.5	+22 34 9.4	.....

Date.	RIGHT ASCENSION.		DECLINATION.		
	Right Ascension.	Difference from Nautical Almanac.	Parallax in Declination.	Declination.	Difference from Nautical Almanac.
1839, May 22	<i>h. m. s.</i> 12 47 54.86	<i>s.</i>	"	<i>° ' "</i>	"
23	12 47 58.26	.....	.....	.....	.....
24	12 48 3.13	.....	.....	.....	.....
25	12 48 9.27	.....	.....	.....	.....

OBSERVED RIGHT ASCENSIONS AND DECLINATIONS OF CERES.

Date.	RIGHT ASCENSION.		DECLINATION.		
	Right Ascension.	Difference from Nautical Almanac.	Parallax in Declination.	Declination.	Difference from Nautical Almanac.
1839, Mar. 21	<i>h. m. s.</i> 13 36 20.58	<i>s.</i> +1.34	" +3.9	<i>° ' "</i> +6 44 0.8	" -20.1
25	13 33 29.25	+1.32	3.9	+7 3 40.3	-19.9
29	13 30 23.29	+1.38	3.9	+7 22 7.5	-19.9
30	13 29 34.94	+1.46	4.0	+7 26 30.7	-19.1
April 9	13 21 3.93	+1.30	...	.....	.....
15	13 15 51.07	+1.25	...	.....	.....
17	13 14 9.32	+1.73	...	.....	.....
18	13 13 18.73	+1.59	3.8	+8 22 14.2	-20.7
19	13 12 28.71	+1.47	...	.....	.....
20	13 11 39.57	+1.65	3.8	+8 24 18.4	-22.1
26	13 6 58.61	+1.53	3.7	+8 25 40.2	-21.3
27	13 6 14.67	+1.43	3.7	+8 25 11.2	-20.4
29	13 4 49.89	+1.42	...	.....	.....
30	13 4 9.05	+1.44	3.7	+8 22 24.9	-22.8
May 2	13 2 51.06	+1.91	3.7	+8 19 35.3	-21.6
6	13 0 27.82	+1.67	3.6	+8 11 29.6	-20.7
7	12 59 55.23	.....	...	.....	.....
9	12 58 53.81	.....	3.5	+8 3 19.2	.....
10	12 58 25.14	.....	...	.....	.....
11	12 57 57.66	.....	3.5	+7 56 56.1	.....
13	12 57 6.91	.....	3.6	+7 49 46.8	.....
16	12 56 1.28	.....	3.5	+7 37 42.5	.....
22	12 54 29.25	.....	...	.....	.....
23	12 54 18.73	.....	3.4	+7 3 39.6	.....
24	12 54 10.10	.....	...	.....	.....
25	12 54 2.56	.....	...	.....	.....

Date.	RIGHT ASCENSION.			DECLINATION.			
	Limb observed.	Right Ascension of Centre.	Difference from Nautical Almanac.	Limb observed.	Parallax in Declination.	Declination of Centre.	Difference from Nautical Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>		<i>"</i>	<i>° ' "</i>	<i>"</i>
Jan. 7	I. & II.	13 7 22.20	+0.51	.....	...	.....	.....
Mar. 18	I. & II.	13 0 50.64	+0.64	S.	+1.7	-4 46 36.5	-1.4
21	I. & II.	12 59 32.16	+0.56	N. & S.	1.6	-4 38 11.8	-3.2
25	I. & II.	12 57 44.00	+0.54	N. & S.	1.6	-4 26 36.6	-1.5
27	I. & II.	12 56 48.82	+0.66	.....	...	.....	.....
29	I. & II.	12 55 52.79	+0.54	N. & S.	1.6	-4 14 48.7	-1.4
30	I. & II.	12 55 24.83	+0.72	.....	1.6	-4 11 51.1	-1.9
April 8	I. & II.	12 51 9.38	+0.51	N. & S.	1.6	-3 45 9.4	-2.4
10	I. & II.	12 50 12.99	+0.48	S.	1.6	-3 39 14.6	+2.3
17	I. & II.	12 47 0.87	+0.81	N. & S.	1.6	-3 19 32.6	-1.1
18	I. & II.	12 46 34.08	+0.62	N. & S.	1.6	-3 16 50.3	-1.2
19	I. & II.	12 46 7.76	+0.64	.....	...	.....	.....
20	I. & II.	12 45 41.74	+0.67	.....	...	.....	.....
24	I. & II.	12 44 0.99	+0.88	N. & S.	1.6	-3 1 23.4	-1.7
26	I. & II.	12 43 12.24	+0.44	.....	1.6	-2 56 33.3	-0.6
29	I. & II.	12 42 2.80	+0.45	.....	...	.....	.....
30	I. & II.	12 41 40.52	+0.45	.....	1.6	-2 47 30.0	-0.9
May 2	I. & II.	12 40 57.75	+0.87	N. & S.	1.6	-2 43 16.8	-0.9
6	I. & II.	12 39 36.80	+0.51	N. & S.	1.6	-2 35 30.3	-0.6
7	I. & II.	12 39 18.04	+0.63	.....	...	.....	.....
9	I. & II.	12 38 41.88	+0.62	N. & S.	1.6	-2 30 19.4	-2.5
10	I. & II.	12 38 24.60	+0.59	.....	...	.....	.....
11	I. & II.	12 38 7.73	+0.40	N. & S.	1.5	-2 27 9.2	-1.9
13	I. & II.	12 37 36.16	+0.46	N.	1.5	-2 24 14.1	-0.9
16	I. & II.	12 36 53.28	+0.54	N. & S.	1.5	-2 20 22.9	-0.8
17	.....	.....	.....	.....	1.5	-2 19 12.4	+0.8
20	I. & II.	12 36 4.38	+0.34	.....	1.5	-2 16 11.6	-0.2
22	I. & II.	12 35 44.20	+0.74	.....	...	.....	.....
23	I. & II.	12 35 34.74	+0.60	.....	...	.....	.....
24	I. & II.	12 35 26.12	+0.67	.....	...	.....	.....
25	I. & II.	12 35 17.57	+0.17	.....	...	.....	.....
28	I. & II.	12 34 57.82	+0.65	.....	...	.....	.....
30	I. & II.	12 34 47.42	+0.47	.....	...	.....	.....
31	I. & II.	12 34 43.25	+0.43	.....	1.5	-2 10 30.0	+0.2
June 1	I. & II.	12 34 39.82	+0.48	.....	1.5	-2 10 25.1	-0.2
3	I. & II.	12 34 34.89	+0.56	.....	...	.....	.....
5	I. & II.	12 34 32.46	+0.48	.....	...	.....	.....
8	I. & II.	12 34 33.92	+0.57	.....	...	.....	.....
14	I. & II.	12 34 54.34	+0.44	.....	...	.....	.....
15	I. & II.	12 35 0.08	+0.48	.....	...	.....	.....
17	I. & II.	12 35 13.44	+0.51	.....	...	.....	.....
19	I. & II.	12 35 29.22	+0.40	.....	1.4	-2 20 52.8	-1.7
July 3	I. & II.	12 38 28.80	+0.26	.....	...	.....	.....
4	I. & II.	12 38 46.12	+0.36	.....	...	.....	.....

Date.	RIGHT ASCENSION.			DECLINATION.			
	Limb observed.	Right Ascension of Centre.	Difference from Nautical Almanac.	Limb observed.	Parallax in Declination.	Declination of Centre.	Difference from Nautical Almanac.
1839,		<i>h. m. s.</i>	<i>s.</i>		<i>"</i>	<i>° ' "</i>	<i>"</i>
May 13	I. & II.	16 26 52.52	+0.70	.....	+1.0	-19 44 1.3	+17.4
14	I. & II.	16 26 34.76	+0.55	.....	1.0	-19 43 20.2	+19.0
16	I. & II.	16 25 59.28	+0.65	.....	1.0	-19 42 3.0	+16.5
22	I. & II.	16 24 9.91	+0.46	.....	1.0	-19 38 2.9	+14.9
24	I. & II.	16 23 33.10	+0.59	.....	...	.....	.....
27	I. & II.	16 22 37.19	+0.35	.....	1.0	-19 34 38.4	+16.9
June 5	I. & II.	16 19 50.79	+0.59	.....	...	.....	.....
7	I. & II.	16 19 14.10	+0.40	.....	...	.....	.....
8	I. & II.	16 18 56.14	+0.56	.....	1.0	-19 26 46.3	+15.9
12	I. & II.	16 17 44.66	+0.46	.....	0.9	-19 24 15.9	+17.5
13	I. & II.	16 17 27.04	+0.37	.....	0.9	-19 23 38.8	+18.4
14	I. & II.	16 17 9.68	+0.39	.....	0.9	-19 23 5.6	+15.9
15	I. & II.	16 16 52.62	+0.56	.....	0.9	-19 22 28.9	+17.5
19	I. & II.	16 15 45.20	+0.36	.....	0.9	-19 20 12.7	+18.2
29	I. & II.	16 13 11.94	+0.48	.....	0.9	-19 15 17.4	+18.2
July 1	I. & II.	16 12 44.19	+0.46	.....	0.9	-19 14 28.3	+16.8
2	I. & II.	16 12 30.76	+0.49	.....	...	.....	.....
3	I. & II.	16 12 17.56	+0.47	.....	0.9	-19 13 40.9	+16.9
4	I. & II.	16 12 4.86	+0.67	.....	...	.....	.....
8	I. & II.	16 11 16.18	+0.49	.....	0.9	-19 11 58.1	+16.6
12	I. & II.	16 10 32.83	+0.63	.....	...	.....	.....
20	I. & II.	16 9 22.26	+0.48	.....	...	.....	.....
21	I. & II.	16 9 15.22	+0.60	.....	...	.....	.....
24	I. & II.	16 8 55.76	+0.41	.....	0.9	-19 9 10.6	+16.3

OBSERVED RIGHT ASCENSIONS AND DECLINATIONS OF URANUS.

Date.	RIGHT ASCENSION.		DECLINATION.		
	Right Ascension.	Difference from Nautical Almanac.	Parallax in Declination.	Declination.	Difference from Nautical Almanac.
1839,	<i>h. m. s.</i>	<i>s.</i>	<i>"</i>	<i>° ' "</i>	<i>"</i>
Jan. 2	22 45 0.84	-4.40	+0.4	-8 45 15.9	-16.9
Aug. 24	23 5 55.48	-5.30	...	.....	.....
27	23 5 29.89	-5.11	...	.....	.....
Sept. 2	23 4 37.00	-5.41	...	.....	.....
3	23 4 28.36	-5.20	...	.....	.....
4	23 4 19.56	-5.13	...	.....	.....
5	23 4 10.45	-5.36	...	.....	.....
7	23 3 52.73	-5.28	...	.....	.....
9	23 3 34.99	-5.21	...	.....	.....
10	23 3 25.96	-5.35	...	.....	.....
11	23 3 17.49	-4.93	...	.....	.....
13	23 2 59.58	-5.12	0.4	-6 58 48.4	-21.5
17	23 2 24.43	-5.14	0.4	-7 2 24.4	-20.5
18	23 2 16.04	-4.83	0.4	-7 3 18.4	-20.8

OBSERVED RIGHT ASCENSIONS AND DECLINATIONS OF URANUS.

Date.	RIGHT ASCENSION.		DECLINATION.		
	Right Ascension.	Difference from Nautical Almanac.	Parallax in Declination.	Declination.	Difference from Nautical Almanac.
1839,	<i>h. m. s.</i>	<i>s.</i>	<i>"</i>	<i>° ' "</i>	<i>"</i>
Sept. 21	23 1 49.84	-5.17	0.4	-7 5 56.3	-20.0
22	23 1 41.25	-5.24	0.4	-7 6 48.4	-19.9
23	23 1 32.85	-5.17	...	.....	.....
25	23 1 16.38	-4.87	...	.....	.....
26	23 1 7.97	-5.00	...	.....	.....
30	23 0 35.24	-5.30	...	.....	.....
Oct. 2	23 0 19.64	-5.17	0.4	-7 15 5.1	-19.8
4	23 0 4.32	-5.10	0.4	-7 16 38.7	-20.4
5	22 59 56.67	-5.19	0.4	-7 17 24.5	-20.7
10	22 59 20.46	-5.17	0.4	-7 21 2.1	-21.3
12	22 59 6.87	-5.05	0.4	-7 22 21.8	-19.5
15	22 58 47.17	-5.13	0.4	-7 24 17.5	-19.0
17	22 58 34.68	-5.18	...	.....	.....
19	22 58 22.77	-5.19	0.4	-7 26 40.8	-19.0
20	22 58 17.31	-4.89	...	.....	.....
29	22 57 31.75	-5.37	0.4	-7 31 34.3	-19.4
Nov. 5	22 57 5.97	-5.04	0.4	-7 33 58.2	-18.3
12	22 56 48.68	-4.80	...	.....	.....
16	22 56 42.59	-4.87	...	.....	.....
Dec. 25	22 58 21.42	-4.99	...	.....	.....
27	22 58 34.03	-4.90	0.4	-7 22 42.1	-17.6
28	22 58 40.31	-5.12	0.4	-7 22 3.0	-21.0
31	22 59 1.13	-4.82	0.4	-7 19 45.0	-16.9

OBSERVATIONS
OF
THE COMET OF JANUARY 1840,
LUNAR OCCULTATIONS OF STARS,
AND
ECLIPSES OF JUPITER'S SATELLITES.

1839.

OBSERVATIONS OF THE COMET OF JANUARY 1840.

THESE Observations were made with the Annular Micrometer, applied to the Equatorial Telescope, having a magnifying power of 50. Both the Outer and Inner Rings of the Micrometer were employed. The radius of the former is $13' 26''$ of space; of the latter $9' 41''$. The times of observation were given by an Assistant Clock, shewing approximate Sidereal Times, and duly compared with the Transit Clock.

Date.	OBJECT.	North or South of Centre.	OUTER RING.	INNER RING.	INNER RING.	OUTER RING.	Concluded Transit over Hourly Circle.	COMET'S	
			Ingress.	Ingress.	Egress.	Egress.		R. A.	Declination.
1839, Dec. 28	Comet....	N.	m. s.	m. s.	m. s.	m. s.	h. m. s.	m. s.	' "
	*.....	S.	15 49	16 14	16 45	17 9	12 16 29.2	.....	.....
			18 23	18 44	19 30	19 50	12 19 6.8	-2 37.6	+16 41
	Comet....	N.	27 20	27 43	28 24.5	28 47	12 28 3.6	.....	.....
	*.....	S.	29 56	30 20	30 55	31 18.5	12 30 37.4	-2 33.8	+16 51
	Comet....	N.	32 37	32 57	33 44	34 4.5	12 33 20.6	.....	.....
	*.....	S.	35 13.5	35 39.5	36 7	36 33	12 35 53.2	-2 32.6	+16 47
	Comet....	N.	37 48	38 8	38 57	39 17.5	12 38 32.6	.....	.....
	*.....	S.	40 25	40 52	41 15	41 42	12 41 3.5	-2 30.9	+16 47
	Comet....	N.	55 47	56 5	57 0	57 19	12 56 32.8	.....	.....
	*.....	S.	58 22	.....	.....	59 34	12 58 58.0	-2 25.2	+16 51
	Comet....	N.	5 42	6 0	7 1	7 20	13 6 30.8	.....	.....
	*.....	S.	8 21	.....	.....	9 24	13 8 52.5	-2 21.7	+16 56

Mean Place of Star for 1840.0: R. A. $16^h 40^m 18^s$; Declination $+3^\circ 1' 43''$. *Histoire Céleste Française*, p. 91: Bessel's Zone, 39.

At $13^h 0^m$ Clock slow $1^m 4^s.2$, losing $5^s.0$ daily.

The Observations made with both the Outer and Inner Rings have been employed for determining the differences of Right Ascension; but those made with the Outer Ring have not been used for the differences of Declination, when there are Observations of the same transit made with the Inner Ring.

In the computations of the Comet's relative position, allowance has been made for the Comet's motion; but the effect of refraction has not been taken into account, as it is much less than the unavoidable errors of observation.

The continuation and reduction of these Observations will be given in the next Volume.

OBSERVED LUNAR OCCULTATIONS.

Date.	Time by Transit-Clock.	True Sidereal Time.	Object.	Phenomenon.
1839, Feb. 23	<i>h. m. s.</i> 8 50 19.8	<i>h. m. s.</i> 8 50 50.2	47 Geminorum.....	Immersion at dark limb
Mar. 21	8 37 22.3	8 37 47.1	A. S. C. 717	Immersion at dark limb
Oct. 19	21 52 45.4	21 53 39.7	96 Aquarii	Immersion at dark limb
Nov. 17	5 31 50.2	5 32 5.5	δ Piscium.....	Immersion at dark limb

All the Occultations were observed by me with the Equatorial Telescope. The Immersion of δ Piscium, on November 17, was observed by Mr WALLACE, with TULLEY'S 4-feet Achromatic, at 5^h 31^m 50^s.1 by Transit Clock.

OBSERVED ECLIPSES OF JUPITER'S SATELLITES.

Date.	Time by Transit-Clock.	True Sidereal Time.	Satellite.	Phenomenon.	Difference from Nautical Almanac.
1839, March 18	<i>h. m. s.</i> 12 46 55.3	<i>h. m. s.</i> 12 47 14.5	I.	Immersion (<i>a</i>)	<i>m. s.</i> - 0 26.1
23	10 54 30.0	10 54 58.6	II.	Immersion	+ 0 1.6
April 17	12 3 53.0	12 3 49.3	II.	Emersion (<i>a</i>)	+ 0 40.6
(a) Sky hazy.					

The Eclipses were observed by me with the Equatorial Telescope, having a magnifying power of 110.

STORAGE

